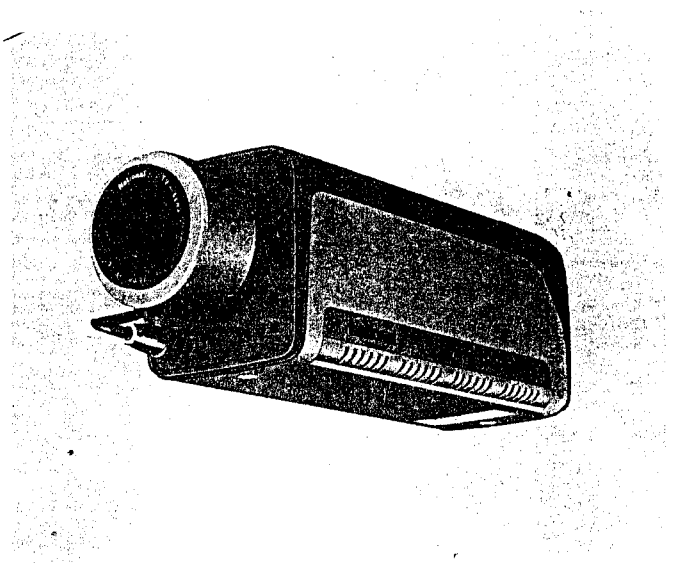
Service Manual

TELEVISION CAMERAS

WV-1050A

WV-1050A/1054A



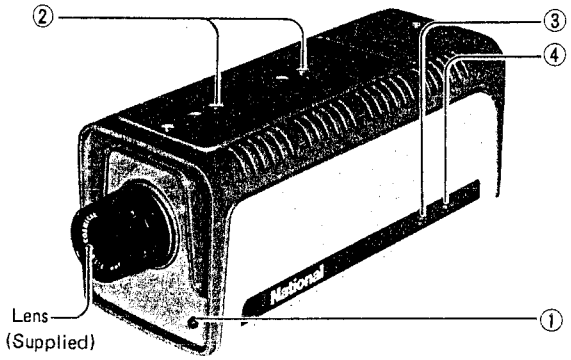
National

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

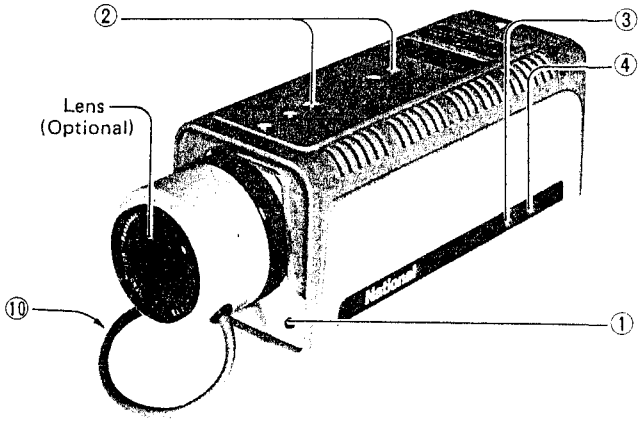
SPECIFICATIONS

	WV-1000A	WV-1004A	WV-1100A	WV-1300A	WV-1050A	WV-1054A	WV-1350A
Power Source	WV-1000AE: 220 or 240V AC 50Hz WV-1000AE/C and WV-1000AE/G Set at 220V WV-1000AE/A and WV-1000AE/B Set at 240V WV-1000AN: 115 or 230V AC 60Hz Set at 115V	WV-1004AE: 24V AC 50Hz WV-1004AN: 24V AC 60Hz	WV-1100AE: 220 or 240V AC 50Hz WV-1100AE/C and WV-1100AE/G Set at 220V WV-1100AE/A and WV-1100AE/B Set at 240V WV-1100AN: 115 or 230V AC 60Hz Set at 115V	WV-1300AE: 220 or 240V AC 50Hz WV-1300AE/C and WV-1300AE/G Set at 220V WV-1300AE/A and WV-1300AE/B Set at 240V WV-1300AN: 115 or 230V AC 60Hz Set at 115V	WV-1050AE: 220 or 240V AC 50Hz WV-1050AE/C and WV-1050AE/G Set at 220V WV-1050AE/A and WV-1050AE/B Set at 240V WV-1050AN: 115 or 230V AC 60Hz Set at 115V	WV-1054AE: 24V AC 50Hz WV-1054AN: 24V AC 60Hz	WV-1350AE: 220 or 240V AC 50/60Hz WV-1350AE/C and WV-1350AE/G Set at 220V WV-1350AE/A and WV-1350AE/B Set at240V WV-1350AN: 115 or 230V AC 50/60Hz Set at 115V
Power Consumption	WV-1000AE : 10W WV-1000AN : 10W	WV-1004AE:11W WV-1004AN:11W	WV-1100AE : 11W WV-1100AN : 11W	WV-1300AE : 11W WV-1300AN : 11W	WV-1050AE : 11W WV-1050AN : 11W	WV-1054AE:12W WV-1054AN:12W	WV-1350AE : 12W WV-1350AN : 12W
Pick-up Tube	2/3" magnetic focusing, magnetic deflection separate mesh vidicon (TYPE 20PE13A)				2/3" magnetic focusing, magnetic deflection separate mesh newvicon (TYPE S4075)		
Scanning	WV-1000AE, WV-1004AE, WV-1100AE, WV-1300AE, WV-1050AE, WV-1054AE and WV-1350AE ..... 625 lines/ 50 fields/ 25 frames (CCIR standard) WV-1000AN, WV-1004AN, WV-1100AN, WV-1300AN, WV-1050AN, WV-1054AN and WV-1350AN ..... 525 lines/ 60 fields/ 30 frames (USA standard)						
Synchronizing	Internal Line Locked Random Interlace		• Internal Line Locked Random Interlace • External 2:1 Interlace	• Internal 2:1 Interlace • External 2:1 Interlace	• Internal Line Locked Random Interlace		• Internal 2 : 1 Interlace • External 2 : 1 Interlace
Minimum Required Illumination	1 foot-candle (10 Lux) with f 1.6 lens		2 foot-candles (20 Lux) at Normal sensitivity mode with f 1.6 lens 0.5 foot-candle (5 Lux) at Highsensitivity mode with f 1.6 lens		0.05 foot-candle (0.5 Lux) with f 1.6 lens under incandescent light		0.06 foot-candle (0.6 Lux) at Normal sensitivity mode with f1.6 lens 0.03 foot-candle (0.3 Lux) at High sensitivity mode with f1.6 lens
Horizontal Resolution at Center	550 lines		600 lines at Normal sensitivity mode 450 lines at High sensitivity mode		500 lines		500 lines at Normal sensitivity mode 400 lines at High sensitivity mode
Signal to Noise Ratio	42 dB		43 dB at Normal sensitivity mode 40 dB at High sensitivity mode		42 dB		43 dB at Normal sensitivity mode 40 dB at High sensitivity mode
External Controls	Focus, Beam, Mechanical Focus, Power ON/OFF		Target, Focus, Beam, Mechanical Focus, Power ON/OFF, Sensitivity, Light Control AUTO/MANUAL		Focus, Beam, Mechanical Focus Power ON/OFF		Focus, Beam, Mechanical Focus, Power ON/OFF Sensitivity
Automatic Light Compensation	10,000 : 1				50,000 : 1 with National auto iris lens		
Video Output	1.0Vp-p composite / 75 ohm UHF connector		1.0Vp-p composite / 75 ohm UHF and 10pin connectors		1.0Vp-p composite / 75 ohm UHF connector		1.0Vp-p composite/75ohm UHF and 10pin connectors
Allowable Ambient Temperature	−10°C ~ +50°C [14°F ~ 122°F]						[-10°C~+50°C(14°F~122°F) at Normal sensitivity mode [-10°C~+40°C(14°F~104°F) at High sensitivity mode
Allowable Ambient Humidity	Less than 90%						
Lens Mounting	Standard C Mount						
Camera Mounting	Two 1/4"-20 threaded Holes						
Dimensions	90 (W) x 214 (D) x 96 (H) mm [3-9/16" (W) x 8-7/16" (D) x 3-3/4" (H)]		90 (W) x 234 (D) x 96 (H) mm [3-9/16" (W) x 9-1/4" (D) x 3-3/4" (H)]		90 (W) x 214 (D) x 96 (H) mm [3-9/16" (W) x 8-7/16" (D) x 3-3/4" (H)]		90 (W) x 234 (D) x 96 (H) mm [3-9/16"(W) x 9-1/4"(D) x 3-3/4" (H)]
Weight	1.4 kg (Approx. 3.1 lbs)		1.6 kg (Approx. 3.5 lbs)		1.4 kg (Approx. 3.1 lbs)		1.6 kg (Approx. 3.5 lbs)

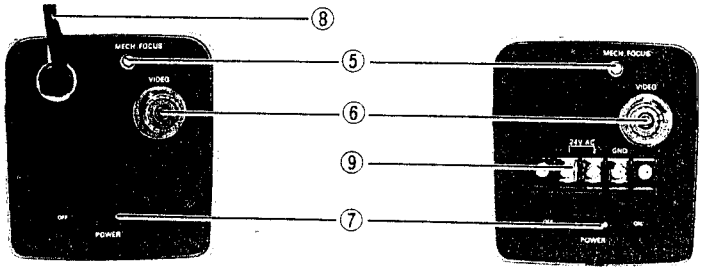
MAJOR OPERATING COMPONENTS



<Side view of WV-1000A and WV-1004A>



<Side view of WV-1050A and WV-1054A >



<Rear view of WV-1000A and WV-1050A >

<Rear view of WV-1004A and WV-1054A >

CONTROLS AND THEIR FUNCTIONS

① Power Indicator Pilot Lamp

② Camera Mounting Screw Holes
Standard photographic pan-head screw size. (¼"–20)

③ Electrical Focus Control [F] ④ Beam Control [B]
These controls have been preset at the factory for optimum picture quality. User should not change these control settings as this may result in severe degradation of camera performance or permanent damage to the pick-up tube.

⑤ Mechanical Focus [MECH FOCUS]
Adjusts the distance from the pick-up tube to the lens by moving the pick-up tube carrier along its optical axis. If required, this allows the minimum working distance between the camera and subject to be reduced. In the case of a zoom lens, focus tracking can be adjusted with this control.

⑥ Video Output Connector [VIDEO]
Use a coaxial cable with a UHF connector. Video output signal is fed to a video monitor or VTR.

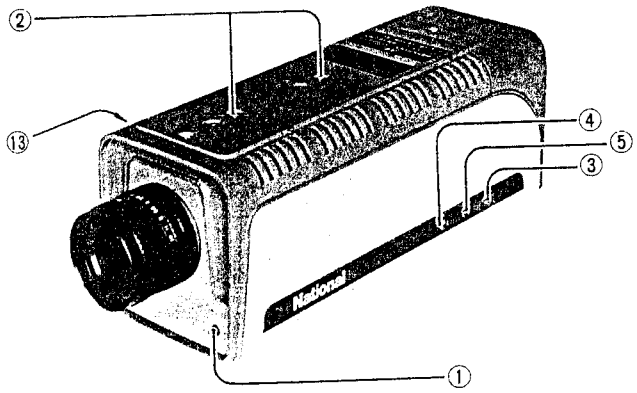
⑦ Power ON/OFF Switch [POWER ON/OFF]

⑧ AC Power Cord–Model WV-1000A and WV-1050A
3-wire power cord for connecting to power outlet

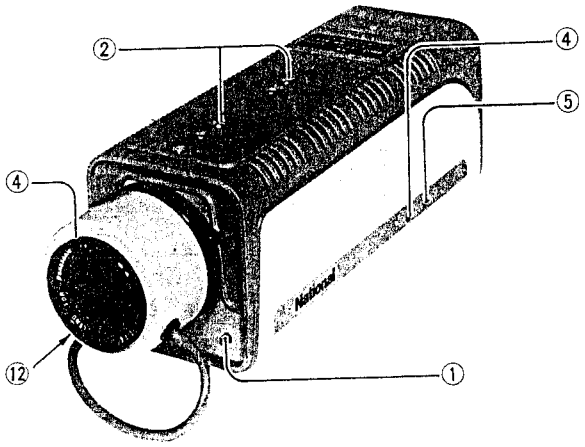
⑨ 24V AC Power Terminal Strip – Model WV-1004A and WV-1054A
Accepts 24V AC 50/60Hz power source. Be sure to connect grounding lead to the GND terminal.

⑩ Connector for Automatic Iris Lens-Model WV-1050A and WV-1054A
Supplies the power and the video signal to the Automatic Iris Lens. The video signal controls the iris with a servo control circuit within the Automatic Iris Lens.

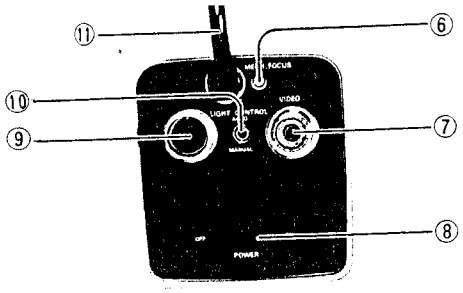
MAJOR OPERATING COMPONENTS



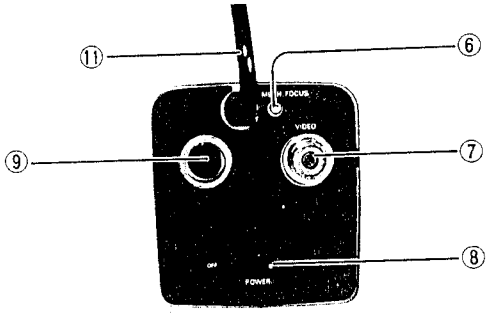
<Side view of WV-1100A and WV-1300A>



<Side view of WV-1350A>



<Rear view of WV-1100A and WV-1300A>



<Rear view of WV-1350A>

CONTROLS AND THEIR FUNCTIONS

① Power Indicator Pilot Lamp

② Camera Mounting Screw Holes
Standard photographic pan-head screw size. (¼"—20)

③ Target Control [T] ④ Electrical Focus Control [F] ⑤ Beam Control [B]
These controls have been preset at the factory for optimum picture quality. User should not change these control settings as this may result in severe degradation of camera performance or permanent damage to the pick-up tube.

⑥ Mechanical Focus [MECH FOCUS]
Adjust the distance from the pick-up tube to the lens by moving the pick-up tube carrier along its optical axis. If required, this allows the minimum working distance between the camera and subject to be reduced. In the case of a zoom lens, focus tracking can be adjusted with this control.

⑦ Video Output Connector [VIDEO]
Use a coaxial cable with a UHF connector. Video output signal is fed to a video monitor or VTR.

⑧ Power ON/OFF Switch [POWER ON/OFF]

⑨ Sync Input Connector
When operating the camera with a Pulse Generator or a Special Effects Generator, connect the cable from the generator to this connector.

⑩ Light Control Switch [LIGHT CONTROL AUTO/MANUAL] Model WV-1100A, and 1300A
AUTO: The electronic light compensation circuit operates and pick-up tube target voltage is automatically regulated.
MANUAL: The automatic light control circuit will be defeated and the target voltage is controlled manually with Target Control ③

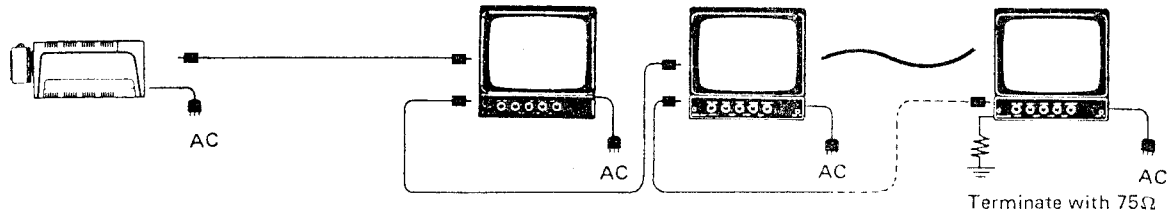
⑪ AC Power Cord — Model WV-1100A, 1300A and WV-1350A
3-wire power cord for connecting to power outlet.

⑫ Connector for Automatic Iris Lens
Supplies the power and video signal to the Automatic Iris Lens. The Video signal will control the iris with the servo control circuit in the Automatic Iris Lens.

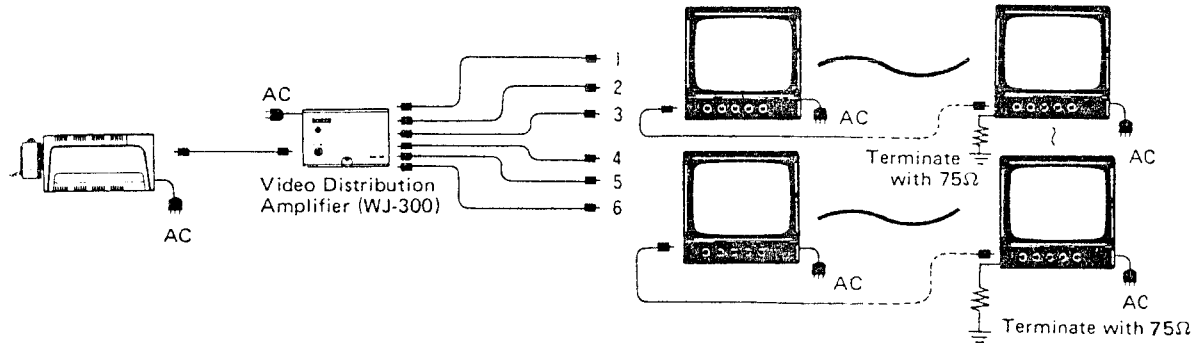
⑬ Sensitivity Select Switch
At the normal sensitivity mode, minimum illumination is 2 foot-candles, at the high sensitivity mode, minimum illumination is 0.5 foot-candle.

SYSTEM CONNECTIONS

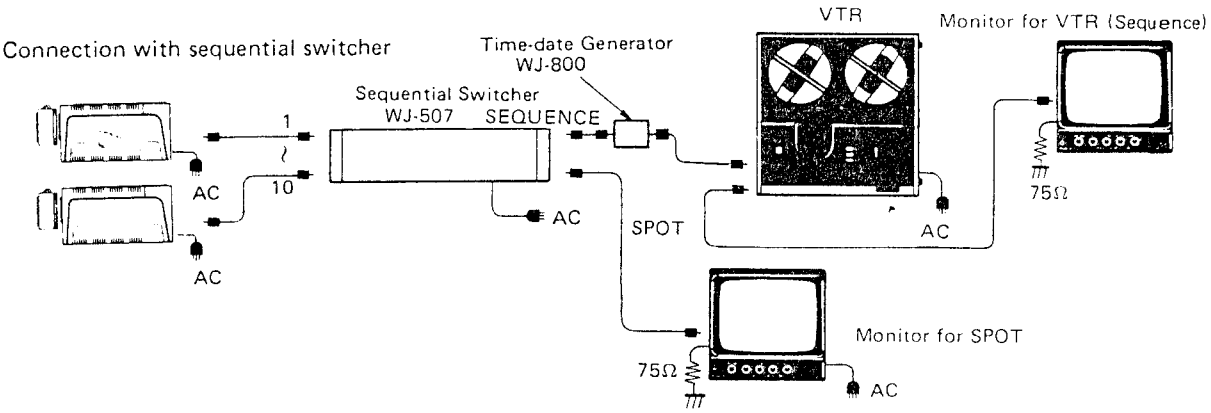
1. Connection with multiple video monitors (Less than 10 monitors)

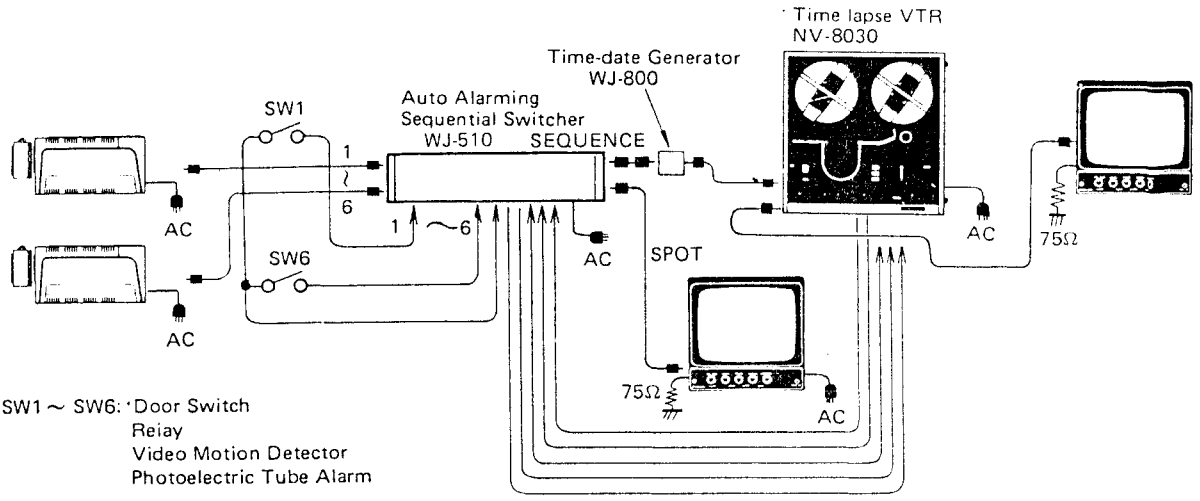


2. Connection with multiple video monitors (More than 10 monitors)

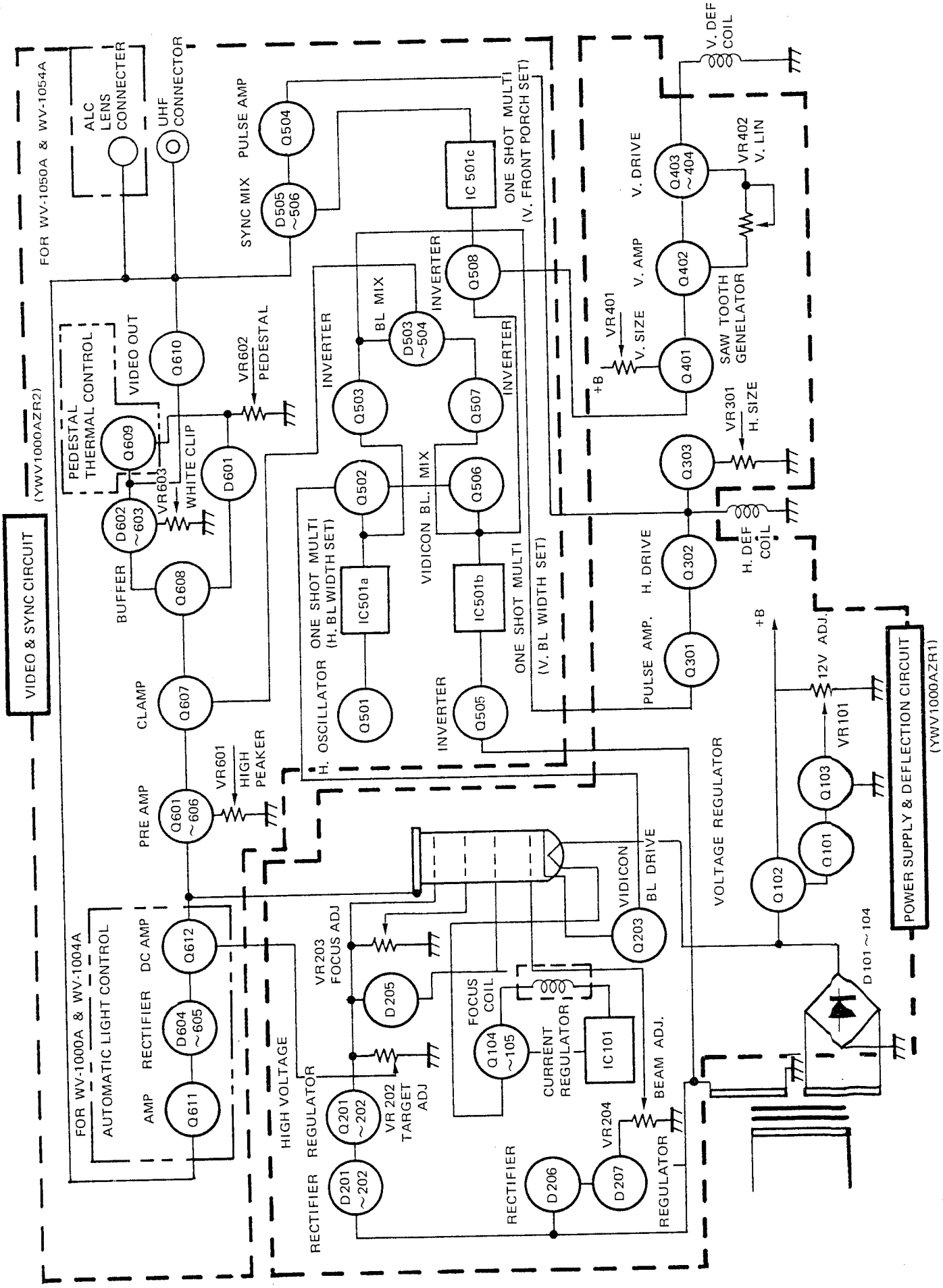


3. Connection with sequential switcher

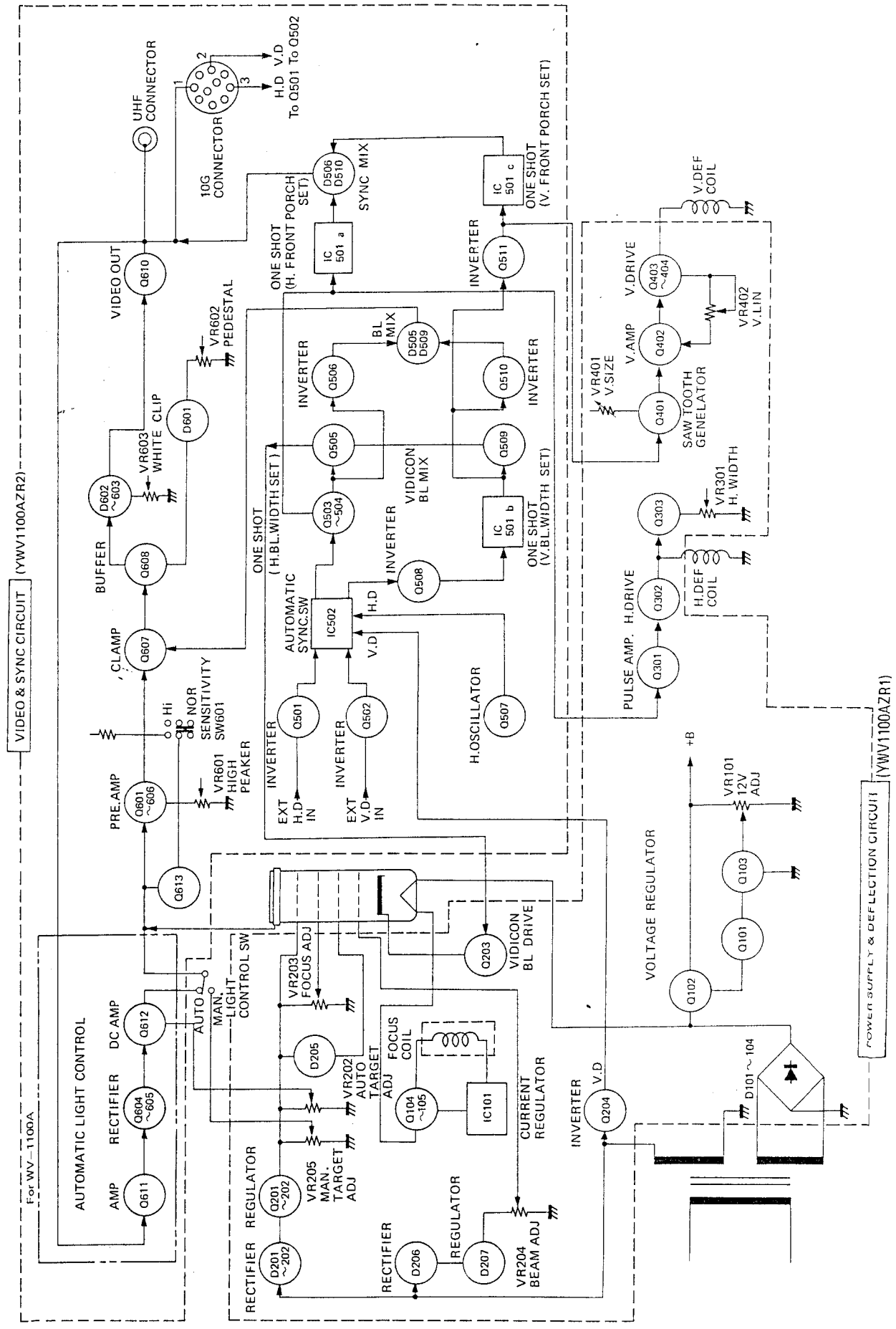




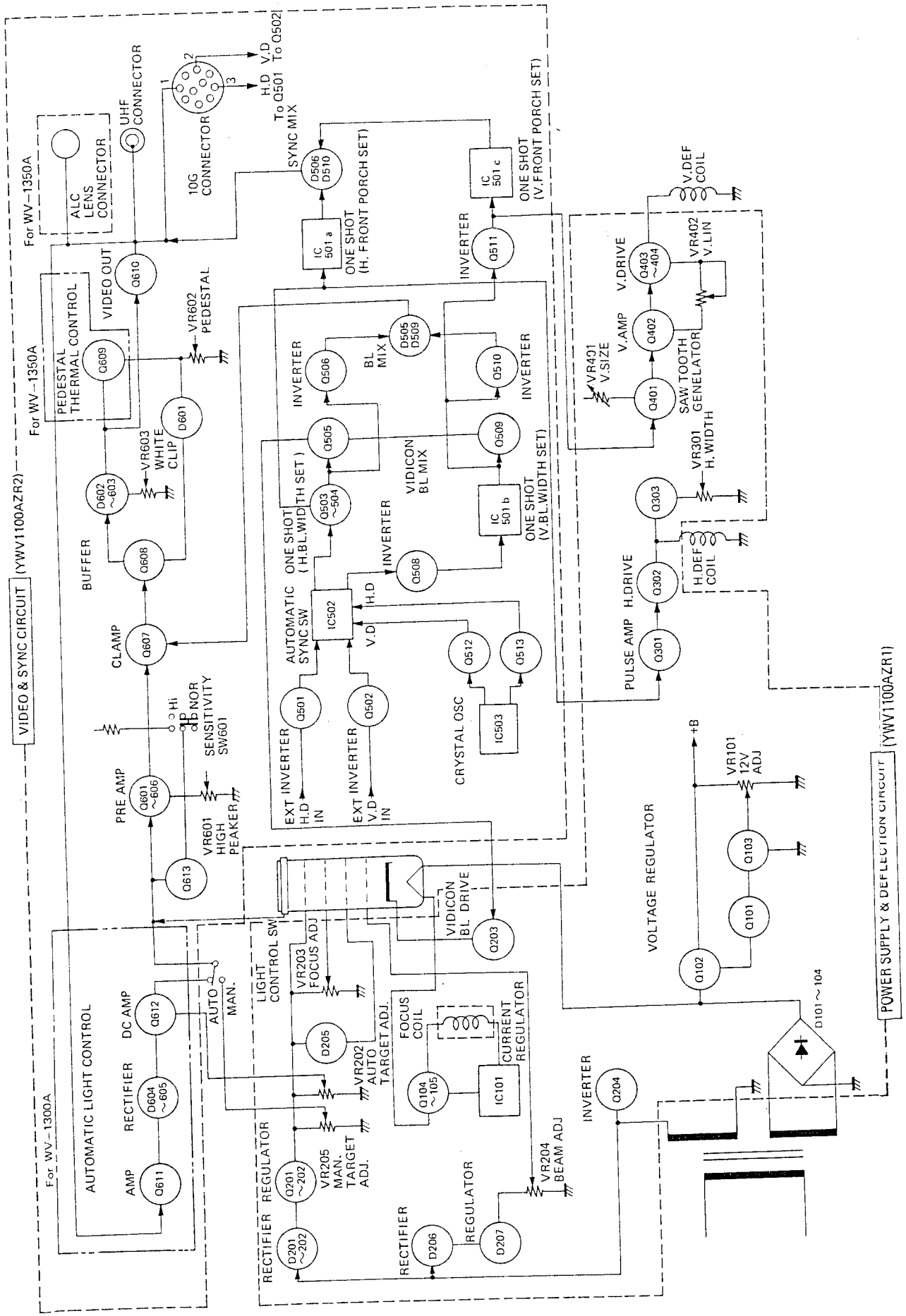
WV-1000A SERIES BLOCK DIAGRAM



WV-1100A BLOCK DIAGRAM



WV-1300A AND WV-1350A BLOCK DIAGRAM



WV-1000A SERIES CIRCUIT DESCRIPTION

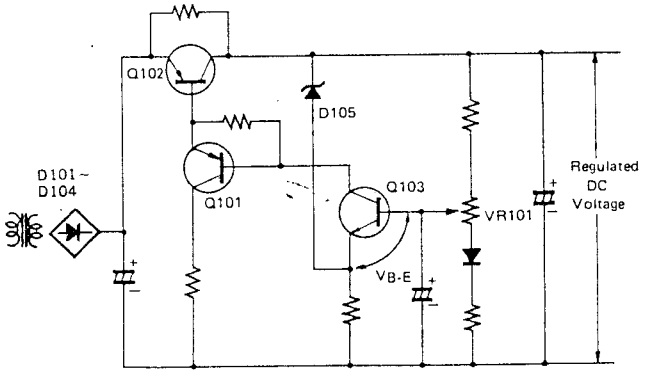
1. CONSTANT VOLTAGE CIRCUIT (Q101 through Q103)

The DC voltage rectified by D101 through D104 is stabilized by Q101, Q102 and Q103.

The output voltage is compared with the reference voltage (generated by D105), and the difference is amplified by Q101 and Q103, and controlled by Q102, and thus the output voltage is stabilized.

- Take, for example, a case where the output voltage has risen.

  When the output voltage goes up,the base voltage of Q103 and the emitter voltage of Q103 rise. The rise of the base voltage is smaller than the rise of the emitter voltage as much as divided resistance so that the voltage $V_{b\text{-}e}$ of Q103 falls to deenergize Q103. Then the base voltages of Q101 and Q102 rise, deenergizing Q101 and Q102 and decreasing the current to lower the output voltage. Therefore, the output voltage can be regulated by means of VR101.



2. HIGH-VOLTAGE STABILIZING CIRCUIT

This circuit supplies the high-voltage required for vidicon operation.

The AC voltage obtained from the power transformer's high-voltage winding is doubled and rectified by D201 and D202 into a DC voltage, which is stabilized by a circuit consisting of Q201, Q202, and R201.

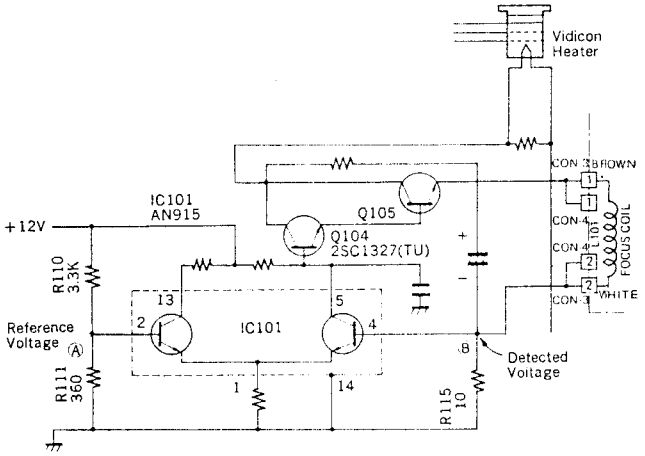
The voltage G1 necessary for beam control is negatively rectified by D206, and stabilized by D207 and R214.

3. CONSTANT CURRENT CIRCUIT

This circuit supplies the constant current required for the focus coil. The constant current is also shunted by a resistor and supplied to the vidicon heater. The reference voltage preset by R110 and R111 is compared with the voltage drop by detecting resistor R115, and amplified by IC101, and the current is controlled by Q104 and Q105.

- The detected voltage at Point B varies with the variations of the current due to transistor and focus coil temperature fluctuations, but the voltage at Point A is kept constant by differential amplifier IC101.

  If the focus current increases, the detected voltage at Point B rises to increase the transistor current, and lower the base voltage of Q104. As a result, Q104 and A105 are controlled to maintain the focus current at constant level.



4. VIDEO AMPLIFIER CIRCUIT

The weak current obtained from the vidicon is amplified by FET Q601, and transistors Q602 through Q606.

The amplified signal is clamped by Q607, and noise for the blanking period is eliminated from the signal. D601 sets their pedestal level, and their white level is clipped by D602 and D603.

The NEWVICON camera employs Q609 to compensate for the large variation of dark level with temperature. After impedance conversion by Q610, the signal is sent out at 75 ohms.

5. ALC CIRCUIT

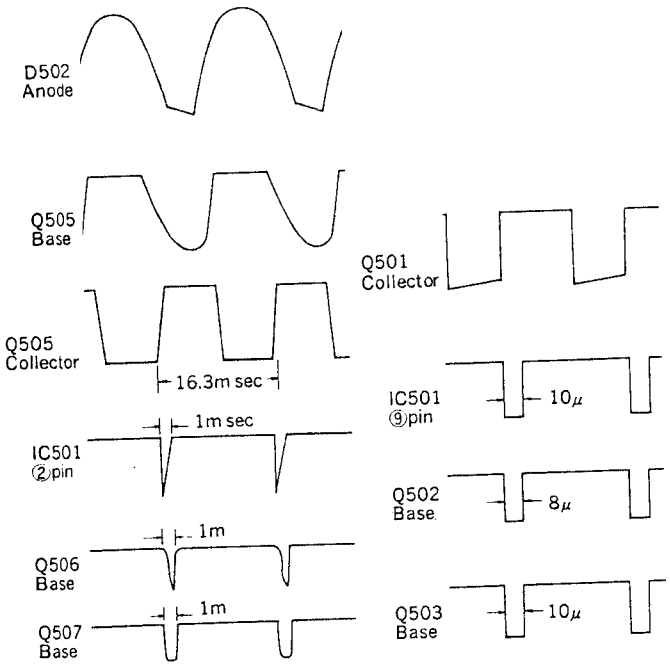
Vidicon signal outputs vary with target voltage, but can be kept constant despite change in brightness. The loop is described by taking the case of a raised video signal output, for example.

Video signal output rises → Feedback to Q611 increases so that amplified output rises → DC voltage, rectified by D604, D605, C621 and C622 rises → Base voltage of Q612 rises, while collector voltage of Q612 falls → Target voltage applied through R653, R654 and R655 drops → Output lowers.

6. SYNC BL CIRCUIT (WV-1000A SERIES)

The horizontal drive signal obtained from the output of Q501 is set to a specified H. BL width by monostable multivibrator IC501a. As for the vertical drive signal,the power supply waveform is shaped and inverted by Q505, and V. BL width is set by IC501b. The waveforms integrated by C505 (horizontal) and C512(vertical)are mixed by Q502 and Q506, and sent

to the vidicon blanking circuit Q203. To remove spike noise from both ends of the BL signal, signals wider than the vidicon blanking are generated by Q503 and Q507, and mixed by D503 and D504 into blanking signal. Horizontal sync signal is generated by inverting deflection pulse by Q504; and vertical sync signal by inverting signal from IC501b. A front porch is added, sync width is set by IC501c, and the horizontal and vertical sync signals are mixed together by D505 and D506, and added to video signals.



7. SYNC BL CIRCUIT (WV-1100A,WV-1300A,WV-1350A)

The horizontal drive signal generated by Q507 (WV-1100A) or Q512 (WV-1300A) is set to a specific H. BL width by a monostable multivibrator consisting of Q503 and Q504. V. BL width is set by inverting the vertical drive signal generated by Q204 (WV-1100A) or Q513 (WV-1300A) by Q508, and adding them to IC501b.

The pulses integrated by C509 (horizontal) and C520 (vertical) are mixed together by Q505 and Q509, and supplied to the vidicon blanking circuit Q203. To eliminate spike noise from both ends of BL signal, signals wider than the vidicon blanking are generated by Q506 (horizontal) and Q510 (vertical), and mixed together by D505 and D509 into blanking signal. Horizontal sync signal is set to a specific sync width by IC501a after delaying the phase of the signal generated by a monostable multivibrator consisting of Q503 and Q504, and adding a front porch. Vertical sync signal is set to a specific sync width by IC501c after inverting the signal generated by IC501b by Q511, and adding a front porch.

D506 and D510 mix the horizontal and vertical sync signals together, and add the mixed signal to video signal.

8. DRIVE SIGNAL GENERATOR CIRCUIT (WV-1300A)

The 31.5 kHz (31.25kHz for CCIR) sine wave generated by a crystal (X501) is divided by 2 and 525 by IC503 into 15.75kHz (15.625kHz) and 60Hz (50Hz) pulses.

9. SYNC SIGNAL AUTOMATIC SWITCHING CIRCUIT (WV-1100A, WV-1300A, WV-1350A)

No external signal

When there is no external signal, pins 5 and 9 of IC502 become low because both Q501 and Q502 are turned off. These two low inputs make NOR gates (Pin 4~6, 8~10) in acting conditions. Therefore signals from Q513 and Q512 are sent out through pins 6→4→3→1 or pins 8→10→11→13.

External signal applied

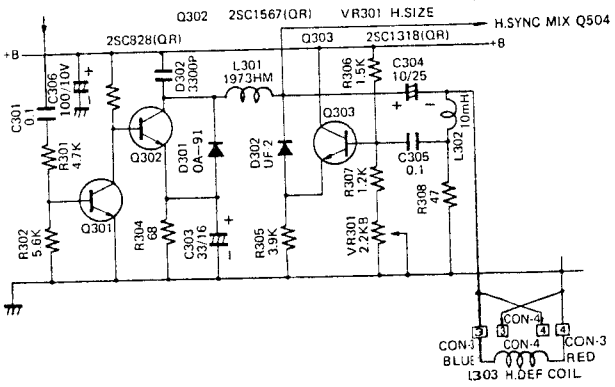
If an external signal is applied, pins 5 and 9 of IC502 become high (C503 and C504 keep high stages). These two high inputs shut NOR gates (Pin 4~6, 8~10) off. Therefore only external signal is sent out through pins 2→1 or pins 12→13.

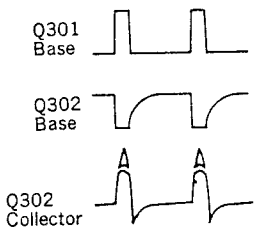
10. DEFLECTION CIRCUIT

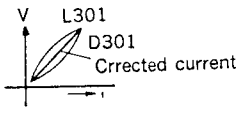
Horizontal deflection section

Horizontal pulse is inverted and amplified by Q301, and switched by Q302 into deflection pulse. VR301 sets the Q303 bias, its emitter voltage is supplied to the collector of Q302 via D302, thus setting the deflection pulse voltage.

L301 and D302 corect the linearity as shown in the figure below.





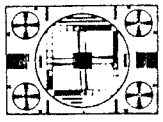


Vertical: Pulse signal from the V. SYNC, BL circuit is amplified by Q401, shaped into sawtooth wave by C403, C404, R402, and VR401, amplified again by Q402, Q403, and Q404, and supplied to the deflection coil.

ADJUSTMENT

■ TEST EQUIPMENT

- Video Monitor
  (Resolution: More than 700 lines)
- Oscilloscope (Band width: More than 5 MHz)
- DC voltmeter
- Standard Test Pattern (YWV200RB99)
- Alignment screw driver (⊖ 3mm, ⊕ 4mm)
- Frequency Counter (100 kHz)



YWV200RB99

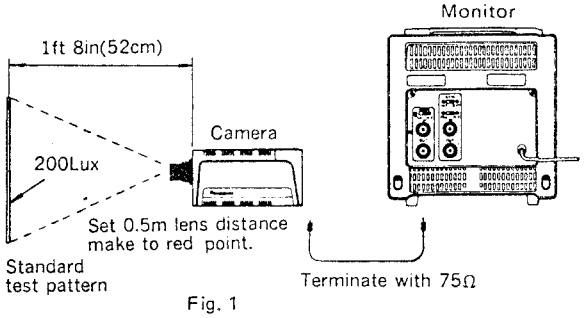


Fig. 1

■ SET UP FOR ADJUSTMENT

1) Position the test pattern in front of the TV camera and connect a coaxial cable between the TV camera and Video In terminal of the video monitor as shown in Fig. 1.

2) TV camera and video monitor should be allowed to warm up for 60 seconds, before proceding with any adjustments.

■ FIELD ADJUSTMENT

1) Connect the TV camera and Video Monitor as shown in Fig. 1.
2) Switch on the monitor and camera power.
3) Allow 60 seconds to warm up.

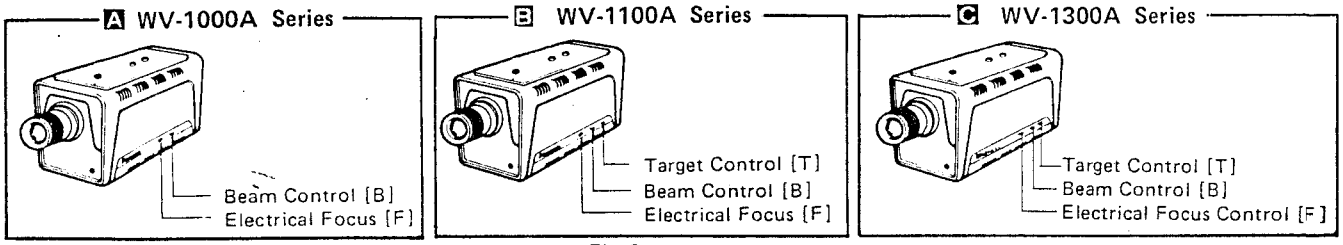


Fig. 2

A B C

4) Mechanical Focus [MECH. FOCUS]
The camera will focus from about 20.5 inch (52cm) to infinity with the f/1.6 16mm lens supplied and with the pick-up tube in its factory set position.
Extreme closeups can be made, and non-standard lenses can be used easily by changing the pick-up tube position with a screw adjustment at the back of the camera. In the case of a zoom lens, focus tracking can be adjusted with this control. See Fig. 3

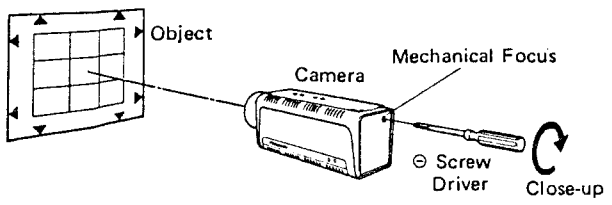


Fig. 3

A B C

5) Electrical Focus Control [F]
Turn the recessed Focus Control on the side panel slowly until the picture on the monitor is sharpest.
See Fig. 2.

A B C

6) Beam Control [B]
Turn the camera's recessed Beam Control on the side panel slowly in a clockwise direction until highlights in picture just appear normal. Then advance the control in the same direction very slightly.
See Fig. 2.

B C

7) Target Control [T]WV-1100A and WV-1300A
Set the Light Control to Manual position.
First adjust the Beam control. Then turn the camera's recessed Target Control on the side panel slowly clockwise until picture just disappears, or until the control has reached the end of rotation. Then slowly turn counter-clockwise until the picture just appears and the white areas are resolved clearly. See Fig. 2.

A B C

8) Deflection Reversal (Internal)
The internal deflection yoke reversal plug has been factory preset for (NOR.) right side up mounting of the camera on ceiling or wall brackets.
If the camera is mounted upside down, say on a tripod, the image on the monitor TV Monitor will also be up-side down.
Therefore, change CON3 plug connector on the CON3 jack (NOR) to CON4 jack connector (REV). See Fig. 4.

BC

9) Sensitivity Switch

Select the sensitivity switch to HI position when the illumination is less than 2 foot-candle (WV-1100A) or 0.06 foot-candle (WV-1350A).

The sensitivity switch has been factory preset for NOR (normal) position.

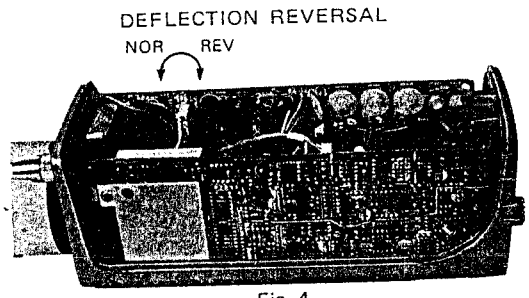


Fig. 4

■ POWER SUPPLY SECTION ADJUSTMENT

For following adjustment, adjustment controls are seen from conductor side of view.

ABC

1) Remove Top Cover

Remove 2 top cover screws. Then lift the top cover.

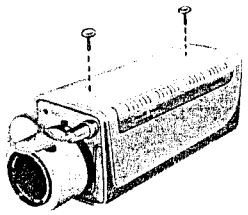


Fig. 5

ABC

2) 12V Adjustment

Adjustment Point:	VR - 101
Test Point:	12V test point

Connect a digital voltmeter to 12V test point and GND test point.

Adjust VR-101 so that the output become 12V($^{+0.1V}_{-0.3V}$).

ABC

3) 400V Adjustment

Adjustment Point: VR-201
Test Point: 400V test point

Connect a digital voltmeter to 400V test point and GND test point.

Adjust VR-201 so that the output becomes 400V(±50).

■ VIDICON (NEWVICON) REPLACEMENT PROCEDURE

ABC

1) Remove Top Cover

Remove 2 top cover screws. Then Lift Top Cover.

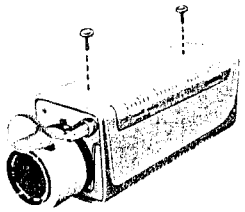


Fig. 6

ABC

2) Remove YWV1000AZR2 (for WV-1000A series) or YWV1100AZR2 (for WV-1100 A or WV-1300A series) Video Circuit Board.

- Remove 2 red screws on video circuit board and remove connectors from the circuit board.
- Then remove video circuit board from the chassis.

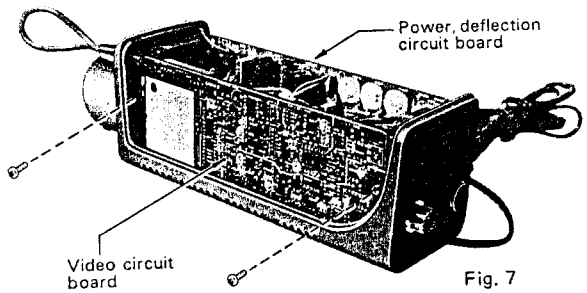


Fig. 7

ABC

3) Remove vidicon socket

Pull vidicon socket backward, and disconnect vidicon socket from tube.

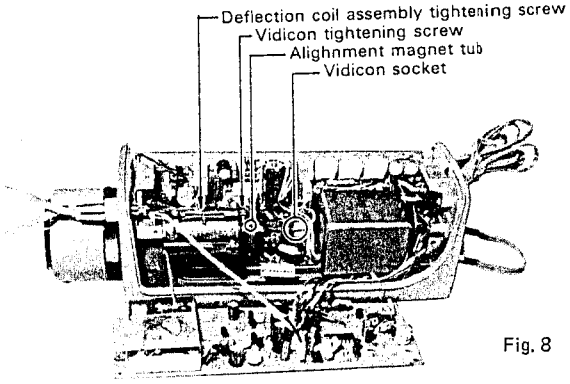


Fig. 8

ABC

4) Remove Lens

Turn lens counterclockwise and remove lens.

ABC

5) Vidicon (Newvicon) Replacement

Loosen the vidicon tightening screw and push on the vidicon's neck frontward to remove.

Read the Esj value of newvicon stamped on the new newvicon's neck.

Esj voltage will be used for adjustment of 11) and 12) Target Adjustment for newvicon on page 12) and 13). Insert new vidicon all the way until it stops.

Connect the vidicon socket to the vidicon, and retighten vidicon tightening screw snugly. Take care not to over tighten and crack the new vidicon tube.

* Make sure that the vidicon is inserted as shown below.

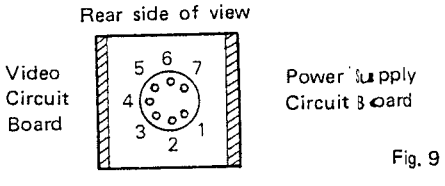


Fig. 9

ABC

6) Remount Lens and Video Circuit Board.

■ INTERNAL CIRCUIT BOARD ADJUSTMENTS

Set the camera and video monitor as shown in Fig. 1. on page ⑩ for the following adjustments. And remove top cover.

Set the sensitivity switch to NOR (normal) for following adjustment.

A

1) H. OSC Adjustment

Adjustment Point:	L501
Test Point:	Q501 Collector

Measure Q501 collector point with a Frequency Counter and adjust L501 so that the frequency becomes 15.75kHz (for USA standard) or 15.625kHz (for CCIR standard).

B

2) H. OSC adjustment

Adjustment Point:	L501
Test Point:	Q507 Collector

Measure Q507 collector point with a Frequency Counter and adjust L501 so that frequency become 15.75kHz (for UAS standard) or 15.625kHz(for CCIR standard).

BC

3) Beam, Auto Target coarse Adjustment

Set light control to AUTO position for WV-1100A and WV-1300A.

Turn Beam Control (VR-204) counterclockwise and set Auto Target (VR-202) to mechanical center so that an image appears.

ABC

4) Mechanical Focus Adjustment

Set the camera, pattern and lens as shown in Fig. 1, and adjust Mechanical Focus for best focus.

ABC

5) Beam Alignment and Centering Adjustment

Adjustment Point:	Centering Magnet
Test Point:	Monitor

The centering magnet should be set so that when the focus control (VR-203) is rotated clockwise and counterclockwise, the picture image will appear to rotate around the center. In other words, as the picture goes in and out of focus, the center will not move.

ABC

6) Picture Tilt

If the test pattern appears tilted, correct by rotating the deflection coil assembly.

Loosen deflection coil assembly tightening screw. Turn the deflection coil assembly and correct the tilt. See Fig. 8

Retighten the deflection coil assembly tightening screw after the above adjustment has been made.

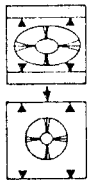
ABC

7) V. Size and V. Lin Adjustments

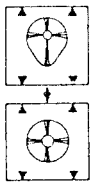
Adjustment Point:	VR-401 V.Size VR-402 V.Lin
Test Point:	Monitor

NOTE: Accurate adjustment can only be made using a under-scan monitor.

Adjust VR-401 and VR-402 to obtain pattern on monitor as shown below.



Turn the VR401 to right



Turn the VR402 to right

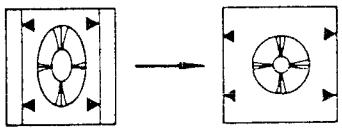
Fig. 10

ABC

8) Width Adjustment

Adjustment Point:	VR-301
Test Point:	Monitor

Adjust VR-301 so that the pattern wedges line up with the edges of the raster.



Turn the VR301 to left

Fig. 11

A

9) Target Adjustment for Vidicon (WV-1000A and WV-1004A)

Adjustment Point:	VR-202 Auto Target
Test Point:	Video output terminal

- Turn VR-602 fully clockwise and VR-603 fully counterclockwise to release pedestal and white clipper.
- Adjust VR-202 so that video output becomes $0.7V_{p\text{-}p}$, not including sync.

BC

10) Target Adjustment for Vidicon (WV-1100A and WV-1300A)

Adjustment Point:	VR-202 Auto Target VR-205 Manual Target
Test Point:	Video output terminal

- Set the light control to AUTO position and make sure that the sensitivity switch is in the normal position.
- Turn VR-602 and VR-603 fully counterclockwise to release pedestal and white clipper.
- Adjust VR-202 so that video output becomes $0.7V_{p\text{-}p}$, not including sync.
- Set the Light Control to MANUAL position.
- Adjust VR-205 so that video output becomes $0.7V_{p\text{-}p}$, not including sync.

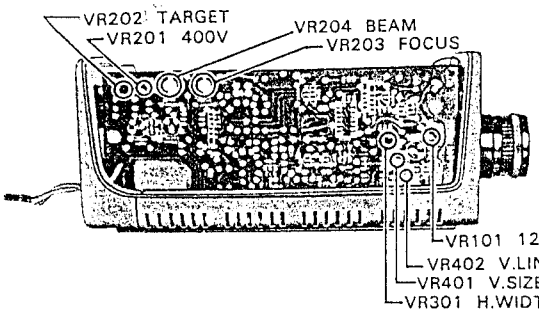
A

11) Target Adjustment for Newvicon (WV-1050A, WV-1054A)

Adjustment Point:	VR202 Auto Target
Test Point:	"K" cathode terminal of YWV1000AZR1 and TA terminal of YWV1000AZR2

- Turn VR602 fully clockwise and VR603 fully counterclockwise to release pedestal and white clipper.
- Connect the oscilloscope to point K(cathode of newvicon) on the power circuit board and read the voltage, VKL.
- Connect the oscilloscope to point "TA" on the YWV 1000AZR2 (video circuit board) and adjust the target voltage with VR-202 to a value equal to Esj + VKL.

Esj: Newvicon Indicating Voltage stamped on the newvicon neck.



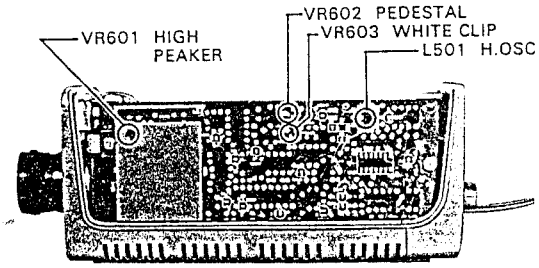


Fig. 12

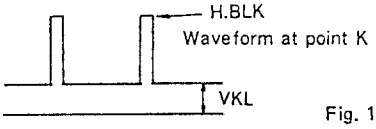


Fig. 14

- Adjust beam as shown in 14).
- Remeasure VKL after beam is properly adjusted, then readjust target voltage(Esj+VKL) if necessary.

BC

12) Target Adjustment for Newvicon (WV-1350A)

Adjustment Point: VR-202 Auto Target Test Point: "K" cathode terminal of YWV1100AZR1 and TA terminal of YWV1100AZR2

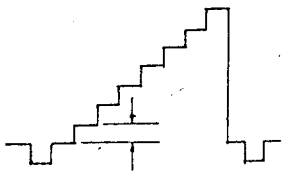
- Turn VR602 and VR603 fully counterclockwise to release pedestal and white clipper.
- Connect the oscilloscope to point K(cathode of newvicon) on power circuit board and read the voltage, VKL.
- Connect the oscilloscope to point "TA" on the YWV 1100AZR2 (video circuit board) and adjust the target voltage with VR-202 to a value equal to Esj+VKL.
- Adjust beam as shown in 14).
- Remeasure VKL after beam is properly adjusted, then readjust target voltage (Esj+VKL) if necessary.

ABC

13) Pedestal Adjustment

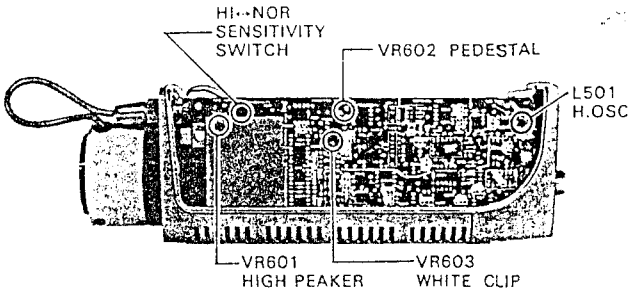
Adjustment Point: VR-602 Test Point: Video output terminal

Connect the oscilloscope to video output terminal. Adjust VR-602 so that black level become 0.05 for newvicon or 0.05±0.02V for vidicon.



0.05 ± 0.02V for vidicon
Less than 0.05V for Newvicon

Fig. 15



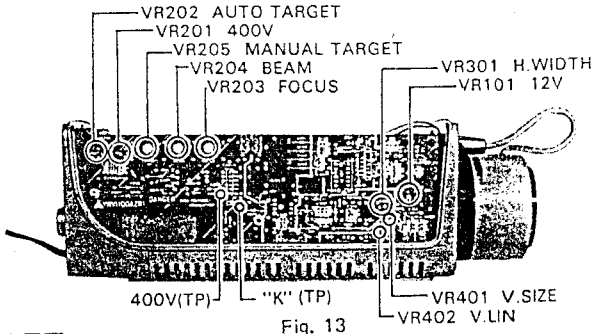


Fig. 13

ABC

14) Beam and White Clip Adjustment

Adjustment Point: VR204 Beam VR 603 White Clip Test Point: Video output terminal

- Shoot a fluorescent lamp, then turn VR603 (white clip) fully counterclockwise. Adjust VR204 to obtain 1.5 V_{p-p} (For Vidicon), 1.2 Vp-p (For Newvicon) white peak video signal not including sync, as shown in below.
- Adjust VR603 to suppress white peak level to 1.0Vp-p for video not including sync.
- For Newvicon tube, remeasure target voltage and readjust if necessary.

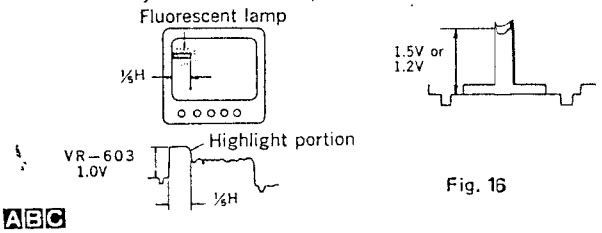


Fig. 16

ABC

15) Focus

Adjustment Point: VR-203 Test Point: Monitor

After confirming best optical adjustment of focus by using the resolution chart, adjust VR203 vidicon electrostatic focus control for sharpest picture on the monitor.

ABC

16) High Peaker H.P.

Adjustment Point: VR601 Test Point: Monitor

When viewing the resolution chart, observe the gray scale area and adjust VR601 to minimize over-shooting at the trailing edge of black which causes a streaking effect.

NOTE: Over correction will reduce resolution.

Fig. 17

WV-1000A AND 1004A SCHEMATIC DIAGRAM

NOTE 1 : Do not order components by Part No. written on schematic diagram or conductor view of P.C.B. Use replacement parts list.

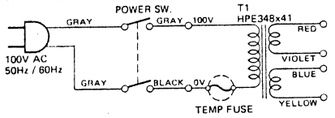
NOTE 2 : DC voltages are measured with digital voltmeter to chassis.

NOTE 3 : All resistors are in ohms, 1/8W ±5% unless otherwise noted.
K=1000, M=1000K

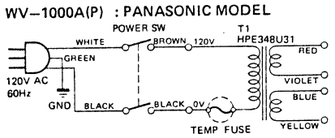
NOTE 4 : All capacitors are in μF unless otherwise noted.
P=μμF

AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

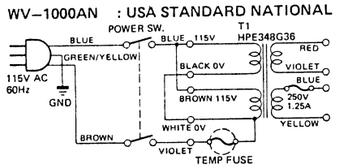
WV–1000A : DOMESTIC NATIONAL MODEL



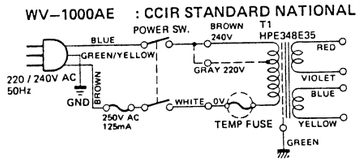
WV–1000A(P) : PANASONIC MODEL

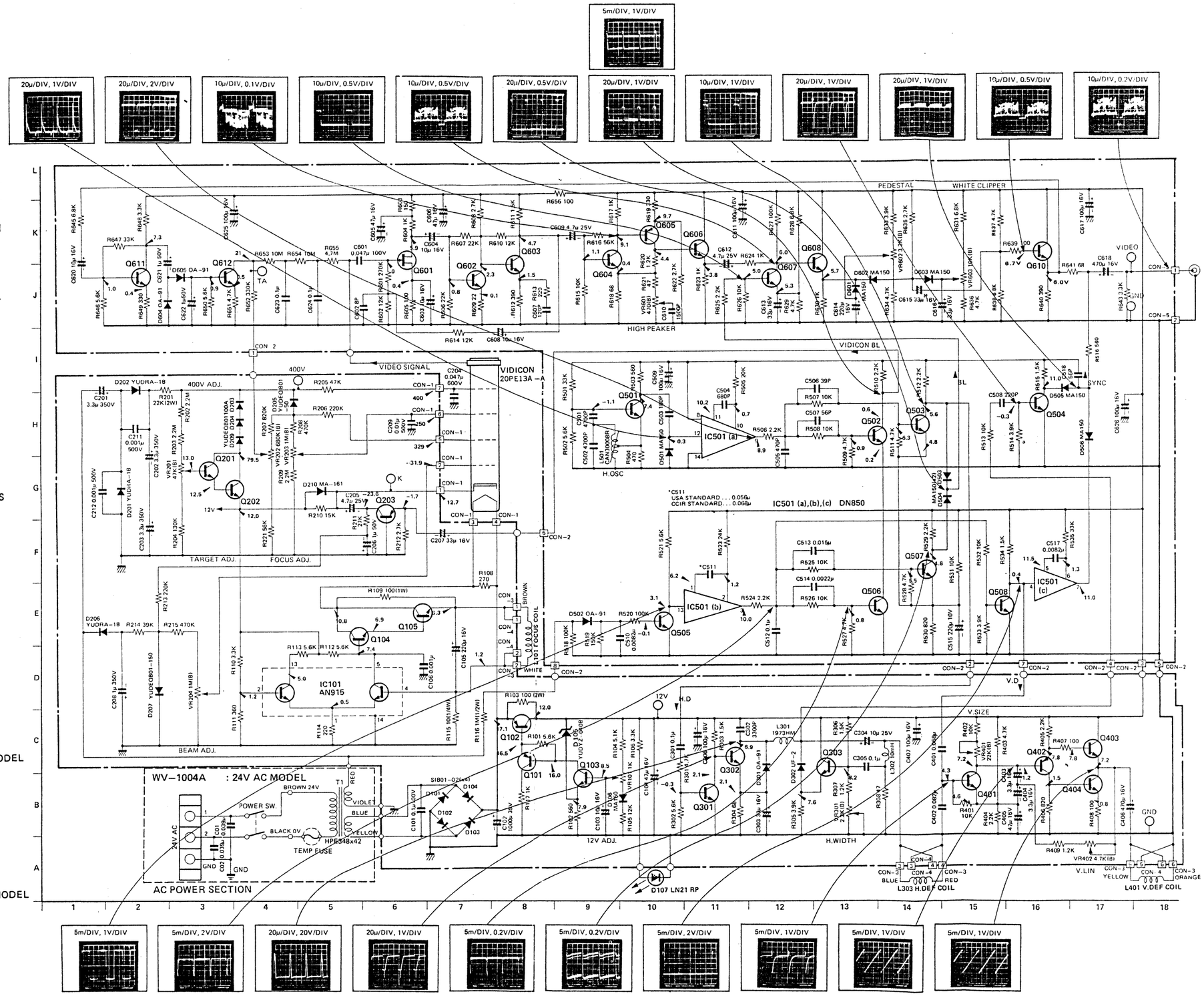


WV–1000AN : USA STANDARD NATIONAL MODEL



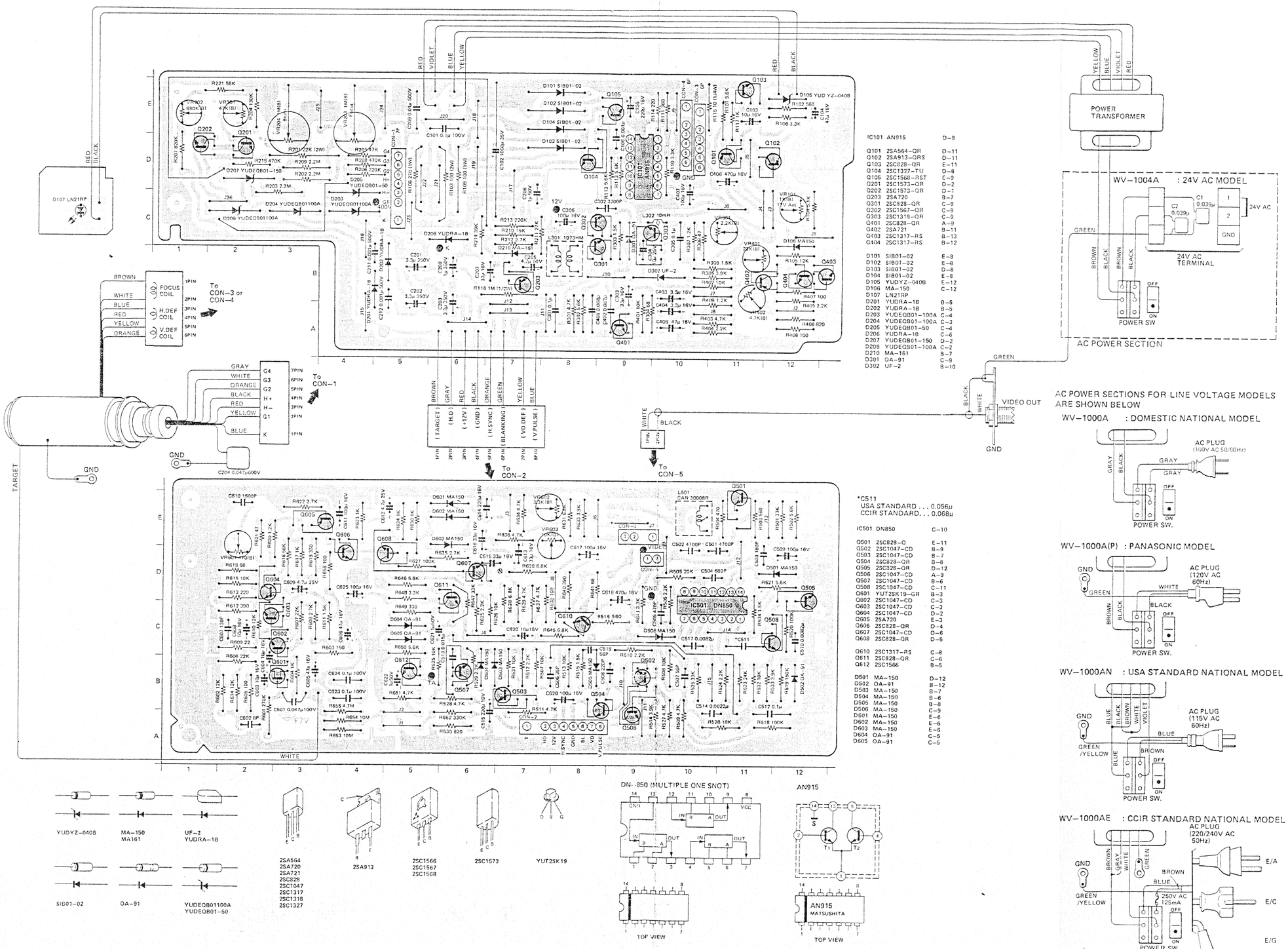
WV–1000AE : CCIR STANDARD NATIONAL MODEL





IC101	AN915	E–8
IC501		
(a)	DN850	H–11
(b)	DN850	E–11
(c)	DN850	E–16
Q101	2SA564–QR	C–8
Q102	2SA913–QRS	C–8
Q103	2SC828–QR	B–9
Q104	2SC1327–TU	E–5
Q105	2SC1568–RST	E–6
Q201	2SC1573–QR	G–3
Q202	2SC1573–QR	G–3
Q203	2SA720	G–6
Q301	2SC828–QR	B–11
Q302	2SC1567–QR	C–11
Q303	2SC1318–QR	C–13
Q401	2SC828–QR	B–15
Q402	2SA721	C–16
Q403	2SC1317–RS	C–17
Q404	2SC1317–RS	B–17
Q501	2SC828–Q	H–10
Q502	2SC1047–CD	H–13
Q503	2SC1047–CD	H–14
Q504	2SC828–QR	H–16
Q505	2SC828–QR	E–10
Q506	2SC1047–CD	E–13
Q507	2SC1047–CD	F–14
Q508	2SC1047–CD	E–15
Q601	YUT2SK19–GR	K–6
Q602	2SC1047–CD	J–7
Q603	2SC1047–CD	J–8
Q604	2SC1047–CD	K–9
Q605	2SA720	K–10
Q606	2SC828–QR	K–11
Q607	2SC1047–CD	J–12
Q608	2SC828–QR	J–13
Q610	2SC1317–RS	K–16
Q611	2SC828–QR	J–2
Q612	2SC1566	J–3
D101	SIB01–02	B–7
D102	SIB01–02	B–7
D103	SIB01–02	B–7
D104	SIB01–02	B–7
D105	YUDYZ–040B	C–9
D106	MA–150	B–10
D107	LN21RP	A–10
D201	YUDRA–1B	G–2
D202	YUDRA–1B	I–2
D203	YUDEQB01100A	H–4
D204	YUDEQB01100A	H–4
D205	YUDEQB01–50	H–4
D206	YUDRA–1B	E–1
D207	YUDEQB01–150	D–2
D209	YUDEQB01100A	H–4
D210	MA–161	G–5
D301	OA–91	C–12
D302	UF–2	C–12
D501	MA–150	H–10
D502	OA–91	E–9
D503	MA–150	G–15
D504	MA–150	G–15
D505	MA–150	I–16
D506	MA–150	H–17
D601	MA–150	J–13
D602	MA–150	J–13
D603	MA–150	J–14
D604	OA–91	J–2
D605	OA–91	J–3

CONDUCTOR VIEW OF WV-1000A AND WV-1004A



IC101	AN915	D–9
Q101	2SA564–QR	D–11
Q102	2SA913–QRS	D–11
Q103	2SC828–QR	E–11
Q104	2SC1327–TU	D–8
Q105	2SC1568–RST	E–9
Q201	2SC1573–QR	D–2
Q202	2SC1573–QR	D–1
Q203	2SA720	B–7
Q301	2SC828–QR	C–9
Q302	2SC1567–QR	C–9
Q303	2SC1318–QR	C–9
Q401	2SC828–QR	A–9
Q402	2SA721	B–11
Q403	2SC1317–RS	B–13
Q404	2SC1317–RS	B–12
D101	SIB01–02	E–8
D102	SIB01–02	E–8
D103	SIB01–02	D–8
D104	SIB01–02	E–8
D105	YUDYZ–0408	E–12
D106	MA–150	C–12
D107	LN21RP	
D201	YUDRA–1B	B–5
D202	YUDRA–1B	B–5
D203	YUDEQB01–100A	C–4
D204	YUDEQB01–100A	C–3
D205	YUDEQB01–50	C–4
D206	YUDRA–1B	C–6
D207	YUDEQB01–150	D–2
D209	YUDEQB01–100A	C–2
D210	MA–161	B–7
D301	GA–91	C–9
D302	UF–2	B–10

IC501	DN850	C–10
Q501	2SC829–Q	E–11
Q502	2SC1047–CD	B–9
Q503	2SC1047–CD	B–7
Q504	2SC828–QR	B–8
Q505	2SC328–QR	D–12
Q506	2SC1047–CD	A–9
Q507	2SC1047–CD	B–6
Q508	2SC1047–CD	C–11
Q601	YUT2SK19–GR	B–3
Q602	2SC1047–CD	C–3
Q603	2SC1047–CD	C–3
Q604	2SC1047–CD	D–2
Q605	2SA720	E–3
Q606	2SC828–QR	D–4
Q607	2SC1047–CD	D–6
Q608	2SC828–QR	D–5
Q610	2SC1317–RS	C–8
Q611	2SC828–QR	C–6
Q612	2SC1566	B–5
D501	MA–150	D–12
D502	OA–91	B–12
D503	MA–150	B–7
D504	MA–150	B–6
D505	MA–150	B–8
D506	MA–150	C–9
D601	MA–150	E–6
D602	MA–150	E–6
D603	MA–150	E–6
D604	OA–91	C–5
D605	OA–91	C–5

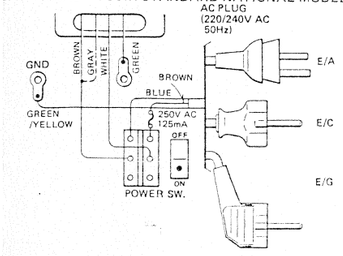
AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

WV–1000A : DOMESTIC NATIONAL MODEL

WV–1000A(P) : PANASONIC MODEL

WV–1000AN : USA STANDARD NATIONAL MODEL

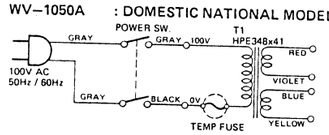
WV–1000AE : CCIR STANDARD NATIONAL MODEL



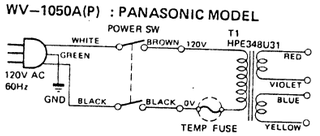
WV-1050A AND WV-1054A SCHEMATIC DIAGRAM

AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

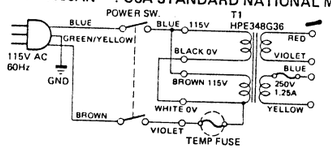
WV–1050A : DOMESTIC NATIONAL MODEL



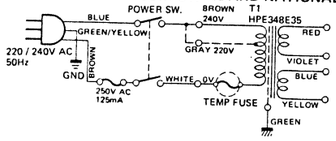
WV–1050A(P) : PANASONIC MODEL



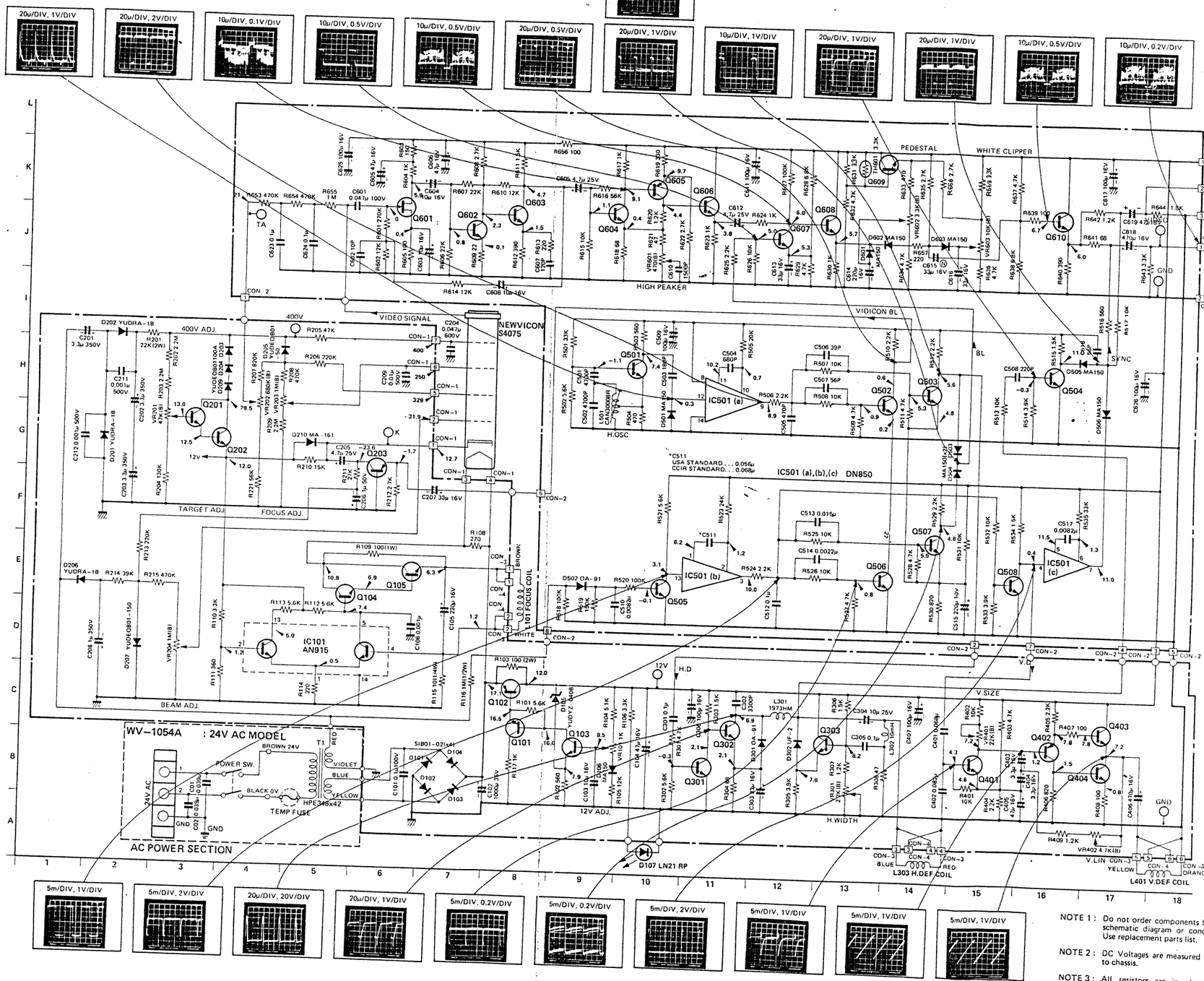
WV–1050AN : USA STANDARD NATIONAL MODEL



WV–1050AE : CCIR STANDARD NATIONAL MODEL



WV–1054A : 24V AC MODEL



IC101	AN915	E–8
IC501		
(a)	DN850	H–11
(b)	DN850	E–11
(c)	DN850	E–16
Q101	2SA564–QR	C–8
Q102	2SA913–QRS	C–8
Q103	2SC828–QR	B–9
Q104	2SC1327–TU	E–5
Q105	2SC1568–RST	E–6
Q201	2SC1573–QR	G–3
Q202	2SC1573–QR	G–3
Q203	2SA720	G–6
Q301	2SC828–QR	B–11
Q302	2SC1567–QR	C–11
Q303	2SC1318–QR	C–13
Q401	2SC828–QR	B–15
Q402	2SA721	C–16
Q403	2SC1317–RS	C–17
Q404	2SC1317–RS	B–17
Q501	2SC828–Q	H–10
Q502	2SC1047–CD	H–13
Q503	2SC1047–CD	H–14
Q504	2SC828–QR	H–16
Q505	2SC828–QR	E–10
Q506	2SC1047–CD	E–13
Q507	2SC1047–CD	E–14
Q508	2SC1047–CD	E–15
Q601	YUT2SK19–GR	K–6
Q602	2SC1047–CD	J–7
Q603	2SC1047–CD	J–8
Q604	2SC1047–CD	K–9
Q605	2SA720	K–10
Q606	2SC828–QR	K–11
Q607	2SC1047–CD	J–12
Q608	2SC828–QR	J–13
Q609	2SC1047–CD	K–13
Q610	2SC1317–RS	K–16
D101	SIB01–02	B–7
D102	SIB01–02	B–7
D103	SIB01–02	B–7
D104	SIB01–02	B–7
D105	YUDYZ–04GB	C–9
D106	MA–150	B–10
D107	LN21RP	A–10
D201	YUDRA–1B	G–2
D202	YUDRA–1B	I–2
D203	YUDEQB0110(A)	H–4
D204	YUDEQB0110(A)	H–4
D205	YUDEQB01–50	H–4
D206	YUDRA–1B	E–1
D207	YUDEQB01–50	D–2
D209	YUDEQB0110(A)	H–4
D210	MA–161	G–5
D301	OA–91	C–12
D302	UF–2	C–12
D501	MA–150	H–10
D502	OA–91	E–9
D503	MA–150	G–15
D504	MA–150	G–15
D505	MA–150	I–16
D506	MA–150	H–17
D601	MA–150	J–13
D602	MA–150	J–13
D603	MA–150	J–14

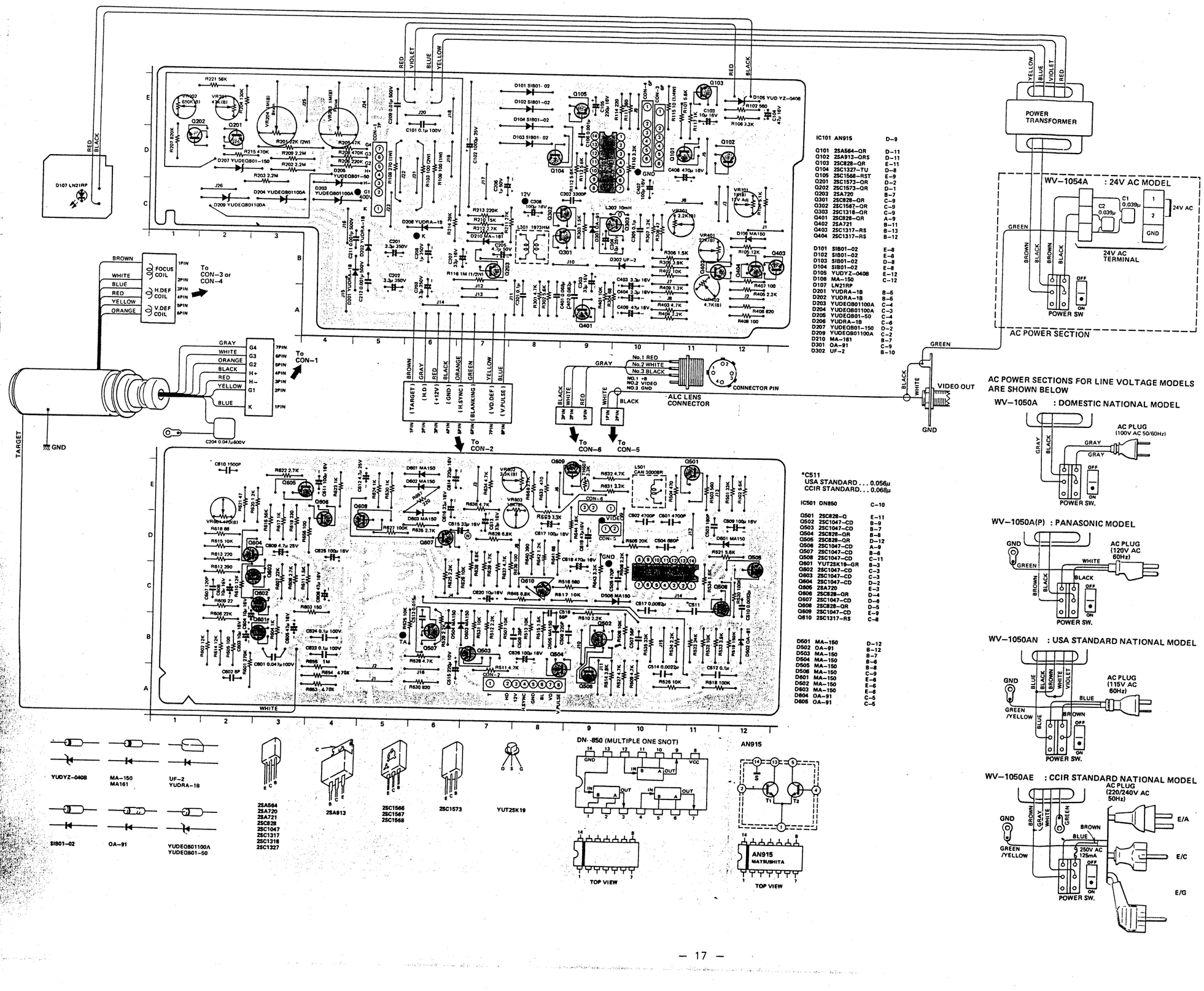
NOTE 1 : Do not order components by Part No. written on schematic diagram or conductor view of P,C,B. Use replacement parts list.

NOTE 2 : DC Voltages are measured with digital voltmeter to chassis.

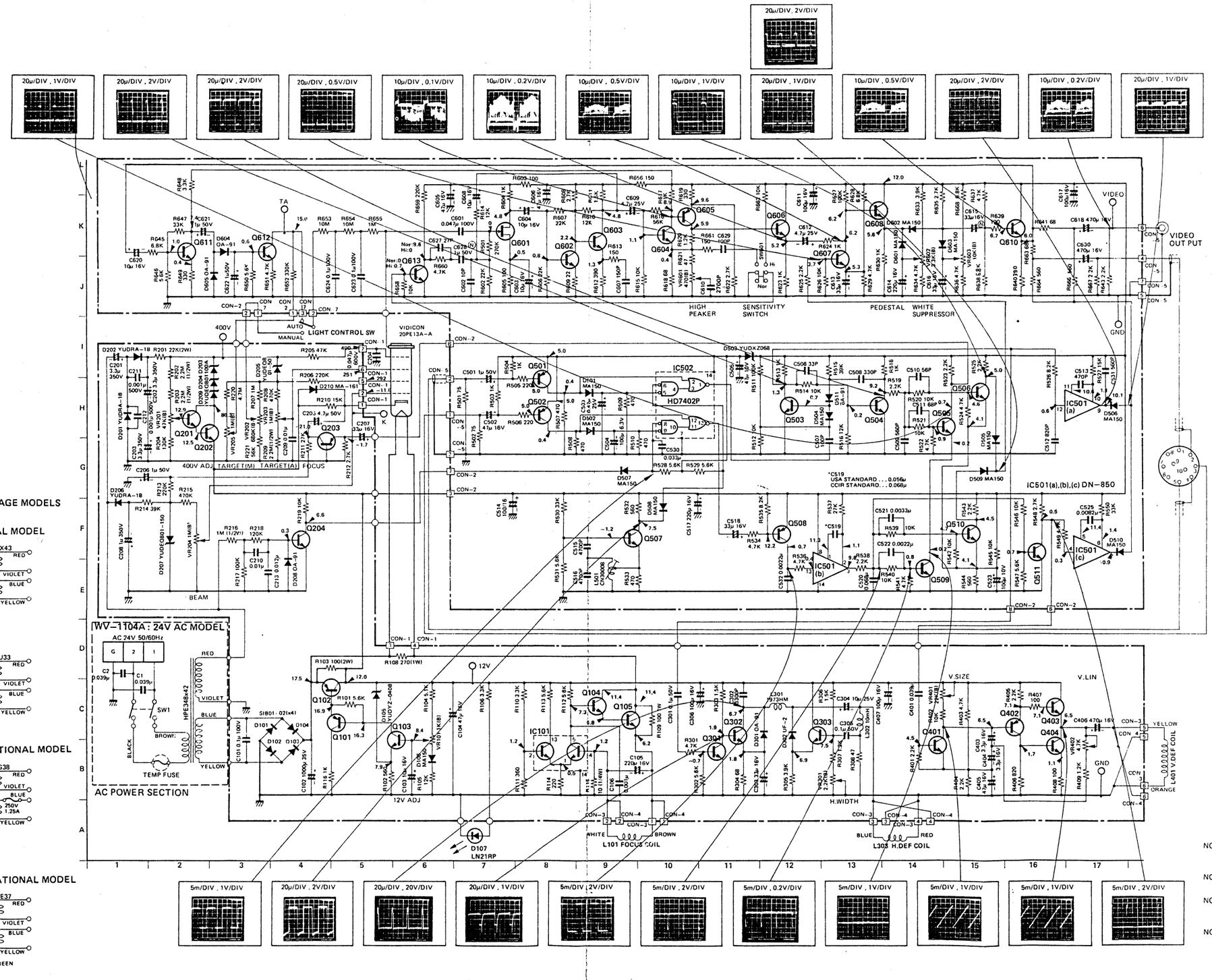
NOTE 3 : All resistors are in ohms, 1/8W ±5% unless otherwise noted.
K=1000, M=1000K

NOTE 4 : All capacitors are in μF unless otherwise noted.
P=μμF

CONDUCTOR VIEW OF WV-1050A AND WV-1054A

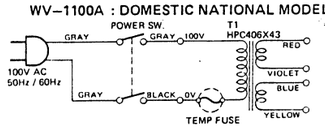


WV-1100A SCHEMATIC DIAGRAM

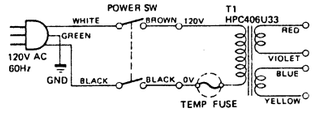


AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

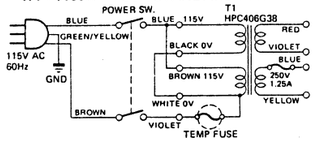
WV-1100A : DOMESTIC NATIONAL MODEL



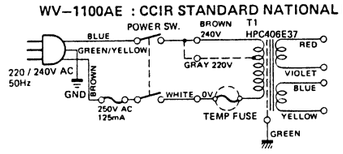
WV-1100A(P) : PANASONIC MODEL



WV-1100AN : USA STANDARD NATIONAL MODEL



WV-1100AE : CCIR STANDARD NATIONAL MODEL



IC101	AN915	B–8
IC501		
(a)	DN850	H–17
(b)	DN850	E–13
(c)	DN850	F–17
IC502	YWHD7402P	H–10
Q101	2SA564–QR	C–5
Q102	2SA913–QRS	C–5
Q103	2SC828–QR	C–6
Q104	2SC1327–TU	C–9
Q105	2SC1568–RST	C–9
Q201	2SC1573–QR	H–2
Q202	2SC1573–QR	H–3
Q203	2SA720–RS	G–4
Q204	2SC828–QR	F–4
Q301	2SC828–QR	B–11
Q302	2SC1567–QR	C–11
Q303	2SC1318–QR	C–12
Q401	2SC828–QR	B–14
Q402	2SA721	C–16
Q403	2SC1317–RS	C–16
Q404	2SC1317–RS	B–16
Q501	2SA721	H–8
Q502	2SA721	H–8
Q503	2SC1047–CD	H–12
Q504	2SC1047–CD	H–13
Q505	2SC1047–CD	H–15
Q506	2SC1047–CD	H–15
Q507	2SC828–Q	F–9
Q508	2SA720–RS	F–12
Q509	2SC1047–CD	F–14
Q510	2SC1047–CD	F–15
Q511	2SC828–QR	F–16
Q601	YUT2SK19–GR	K–7
Q602	2SC1047–CD	J–8
Q603	2SC1047–CD	K–9
Q604	2SC1047–CD	K–10
Q605	2SA720–RS	K–10
Q606	2SC828–QR	K–12
Q607	2SC1047–CD	J–13
Q608	2SC828–QR	K–13
Q610	2SC1317–RS	K–16
Q611	2SC828–QR	J–2
Q612	2SC1566–QR	J–3
Q613	2SC828–QR	J–6
D101	SIB01–02	C–4
D102	SIB01–02	B–4
D103	SIB01–02	B–4
D104	SIB01–02	C–4
D105	YUDYZ–040B	C–5
D106	MA–150	B–6
D107	LN21RP	A–7
D201	YUDRA–1B	H–1
D202	YUDRA–1B	I–1
D203	YUDEQB01100A	I–2
D204	YUDEQB01100A	H–2
D205	YUDZQB01–50A	I–4
D206	YUDRA–1B	F–1
D207	YUDEQB01–150	F–2
D208	OA–91	E–4
D209	YUDEQB01100A	H–3
D210	MA–161	H–4
D301	OA–91	C–12
D302	UF–2	C–12
D501	MA–150	H–9
D502	MA–150	H–9
D503	YUDXZ068	I–11
D504	MA–150	H–13
D505	MA–150	G–15
D506	MA–150	H–17
D507	MA–150	G–9
D508	MA–150	F–9
D509	MA–150	G–15
D510	MA–150	F–17
D511	MA–150	H–13
D601	MA–150	K–14
D602	MA–150	K–14
D603	MA–150	K–15
D604	OA–91	J–2
D605	OA–91	J–2

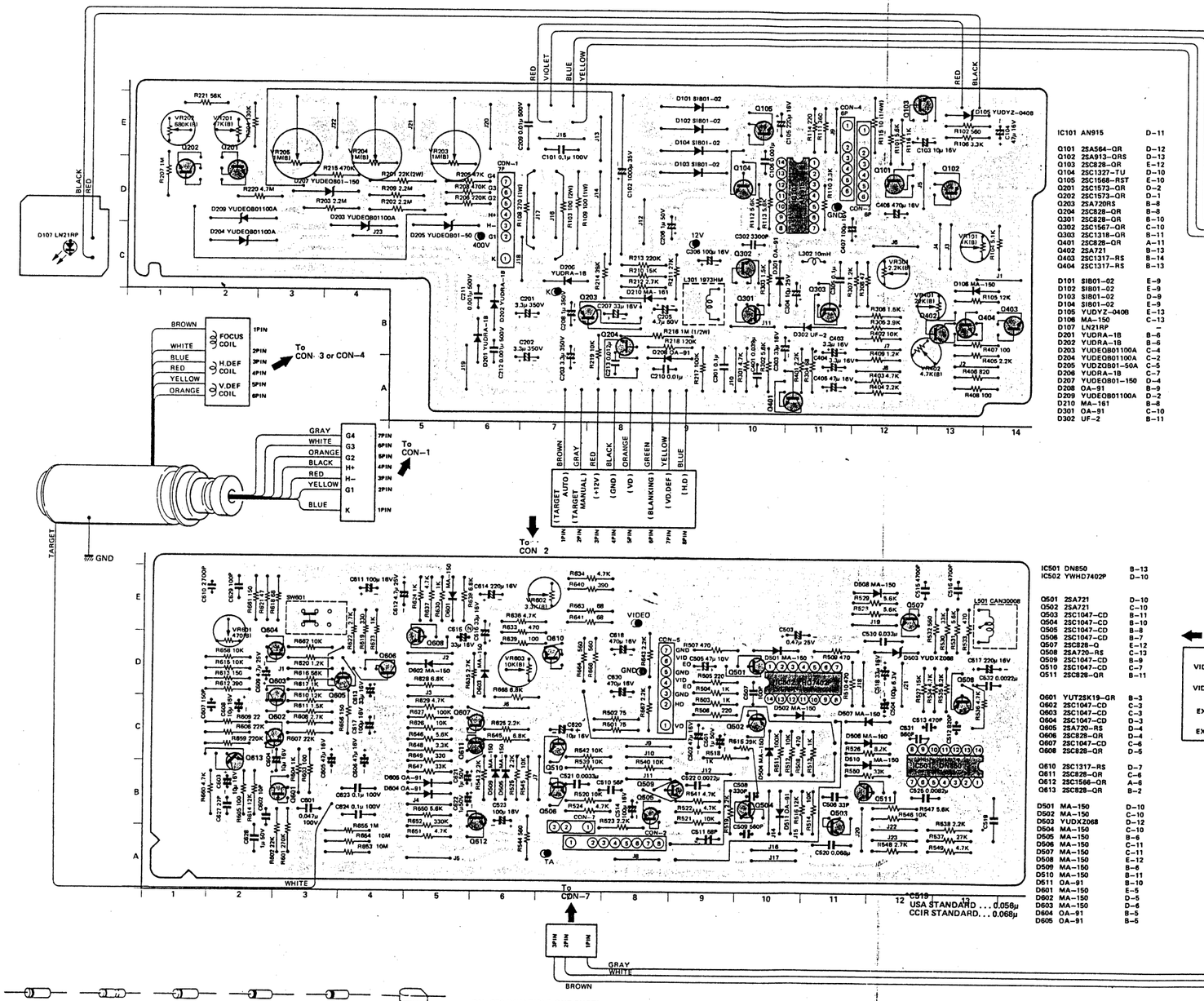
NOTE 1 : Do not order components by Part No. written schematic diagram or conductor view of P.C Use replacement parts list.

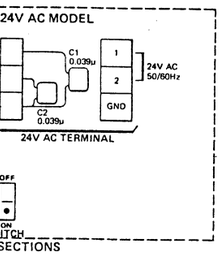
NOTE 2 : DC Voltages are measured with digital voltme to chassis.

NOTE 3 : All resistors are in ohms, 1/8W ±5% unl otherwise noted.
K=1000, M=1000K

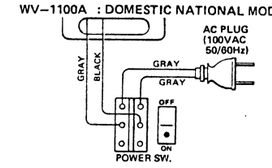
NOTE 4 : All capacitors are in μF unless otherwise not P=μμF

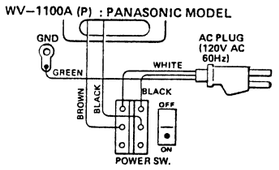
CONDUCTOR VIEW OF WV-1100A

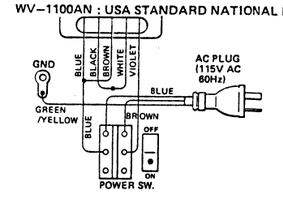


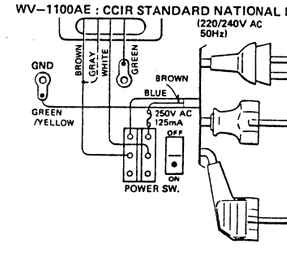


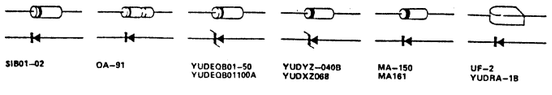
AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

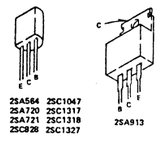


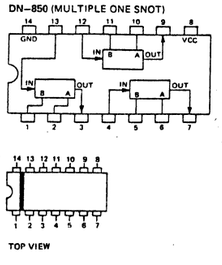


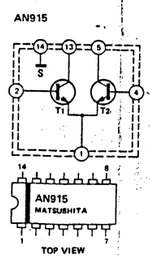


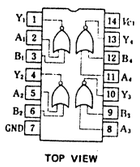




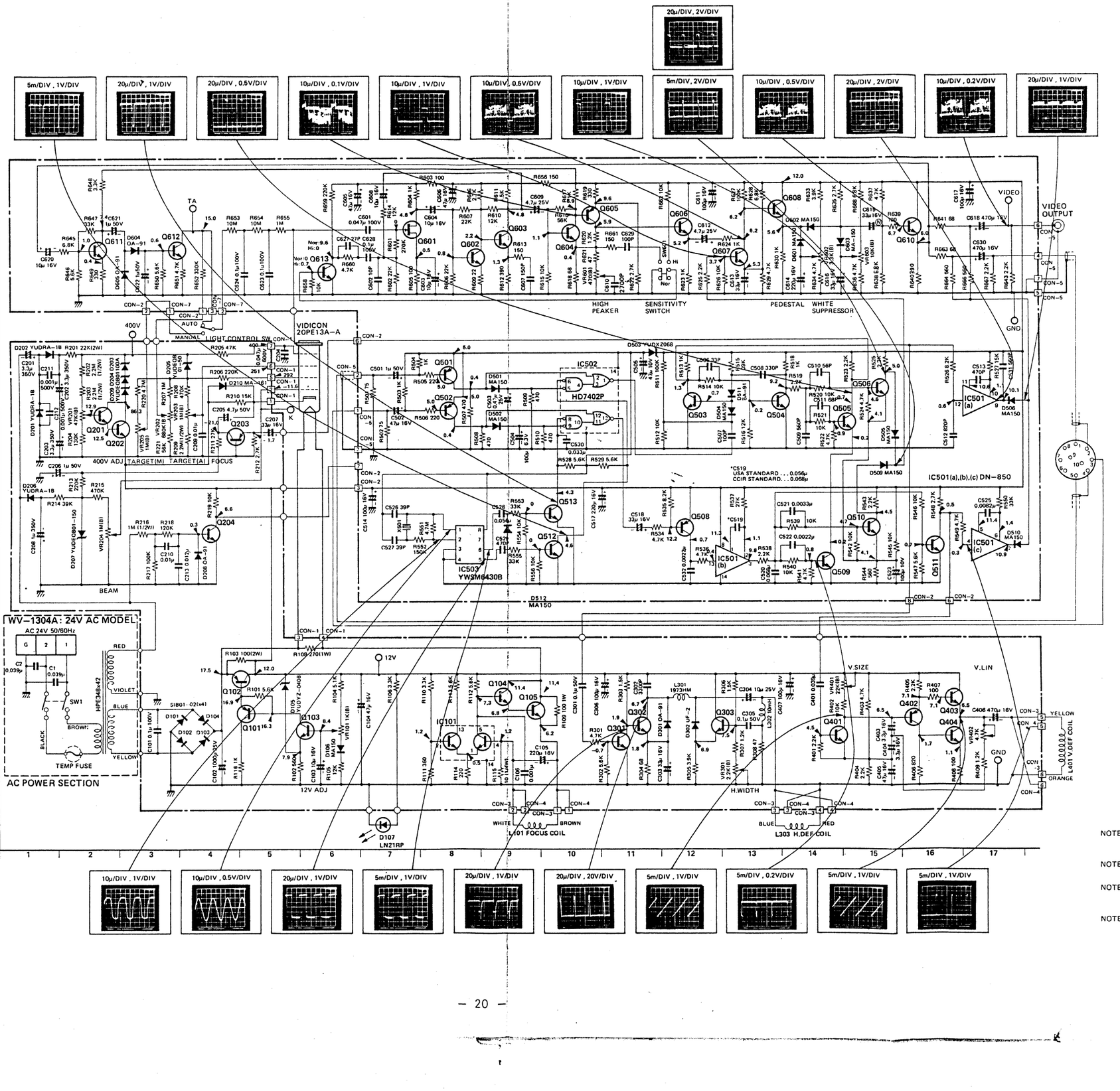






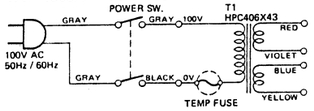


WV-1300A SCHEMATIC DIAGRAM

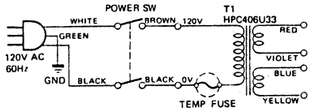


AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

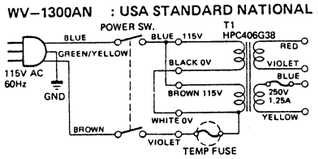
WV-1300A : DOMESTIC NATIONAL MODEL



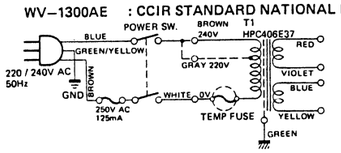
WV-1300A(P) : PANASONIC MODEL



WV-1300AN : USA STANDARD NATIONAL MODEL



WV-1300AE : CCIR STANDARD NATIONAL MODEL



IC101	AN915	B–8
IC501		
(a)	DN850	H–17
(b)	DN850	E–13
(c)	DN850	F–17
IC502	YWHD7402P	H–10
IC503	YWSM6430B	F–8
Q101	2SA564–QR	C–5
Q102	2SA913–QRS	C–5
Q103	2SC828–QR	C–6
Q104	2SC1327–TU	C–9
Q105	2SC1568–RST	C–9
Q201	2SC1573–QR	H–2
Q202	2SC1573–QR	H–3
Q203	2SA720–RS	G–4
Q204	2SC828–QR	F–4
Q301	2SC828–QR	B–11
Q302	2SC1567–QR	C–11
Q303	2SC1318–QR	C–12
Q401	2SC828–QR	B–14
Q402	2SA721	C–16
Q403	2SC1317–RS	C–16
Q404	2SC1317–RS	B–16
Q501	2SA721	H–8
Q502	2SA721	H–8
Q503	2SC1047–CD	H–12
Q504	2SC1047–CD	H–13
Q505	2SC1047–CD	H–15
Q506	2SC1047–CD	H–15
Q508	2SA720–RS	F–12
Q509	2SC1047–CD	E–14
Q510	2SC1047–CD	F–15
Q511	2SC828–QR	F–16
Q512	2SC828–QR	F–10
Q513	2SC828–QR	F–10
Q601	YUT2SK19–GR	K–7
Q602	2SC1047–CD	J–8
Q603	2SC1047–CD	K–9
Q604	2SC1047–CD	K–10
Q605	2SA720–RS	K–10
Q606	2SC828–QR	K–12
Q607	2SC1047–CD	J–13
Q608	2SC828–QR	K–13
Q610	2SC1317–RS	K–16
Q611	2SC828–QR	K–2
Q612	2SC1566–QR	K–3
Q613	2SC828–QR	J–6
D101	SIB01–02	C–4
D102	SIB01–02	B–4
D103	SIB01–02	B–4
D104	SIB01–02	C–4
D105	YUDYZ–0408	C–5
D106	MA–150	B–6
D107	LN21RP	A–7
D201	YUDRA–1B	H–1
D202	YUDRA–1B	I–1
D203	YUDEQB01100A	I–2
D204	YUDEQB01100A	H–2
D205	YUDZQB01–50A	I–4
D206	YUDRA–1B	F–1
D207	YUDEQB01–150	F–2
D208	OA–91	E–4
D209	YUDEQB01100A	H–3
D210	MA–161	H–4
D301	OA–91	C–12
D302	UF–2	C–12
D501	MA–150	H–9
D502	MA–150	H–9
D503	YUDXZ068	I–11
D504	MA–150	H–13
D505	MA–150	G–15
D506	MA–150	H–17
D509	MA–150	G–15
D510	MA–150	F–17
D601	MA–150	K–14
D602	MA–150	K–14
D603	MA–150	K–15
D604	OA–91	J–3
D605	OA–91	K–3
D512	MA–150	E–9

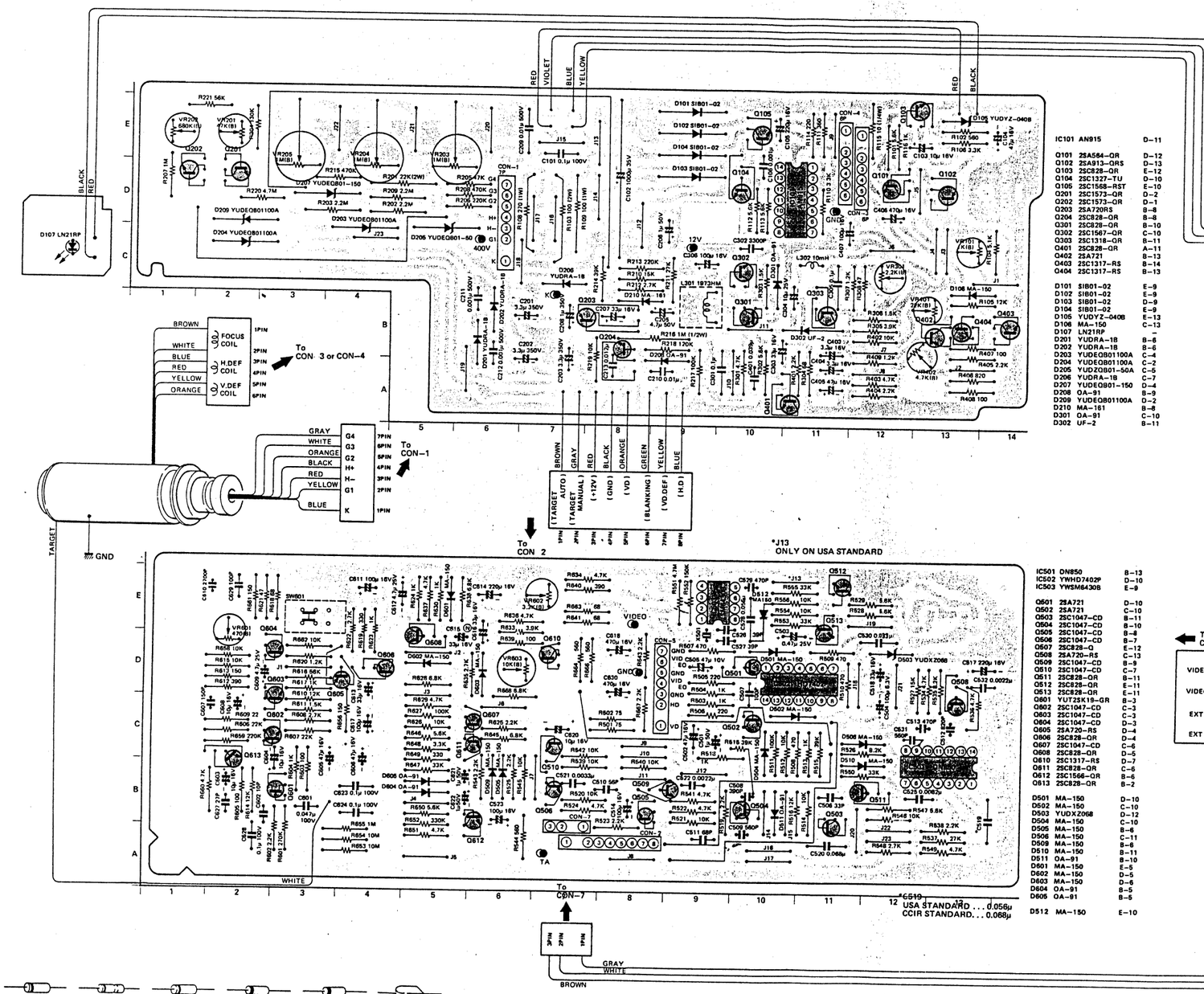
NOTE 1 : Do not order components by Part No. written on schematic diagram or conductor view of P,C,B. Use replacement parts list.

NOTE 2 : DC Voltages are measured with digital voltmeter to chassis.

NOTE 3 : All resistors are in ohms, 1/8W ±5% unless otherwise noted.
K=1000, M=1000K

NOTE 4 : All capacitors are in μF unless otherwise noted P=μμF

CONDUCTOR VIEW OF WV-1300A



IC101 AN915 D–11

Q101 2SA564–OR D–12
Q102 2SA913–ORS D–13
Q103 2SC828–OR E–12
Q104 2SC1327–TU D–10
Q105 2SC1568–RST E–10
Q201 2SC1573–QR D–2
Q202 2SC1573–QR D–1
Q203 2SA720RS B–8
Q204 2SC828–OR B–8
Q301 2SC828–OR B–10
Q302 2SC1567–QR C–10
Q303 2SC1318–QR B–11
Q401 2SC828–QR A–11
Q402 2SA721 B–13
Q403 2SC1317–RS B–14
Q404 2SC1317–RS B–13

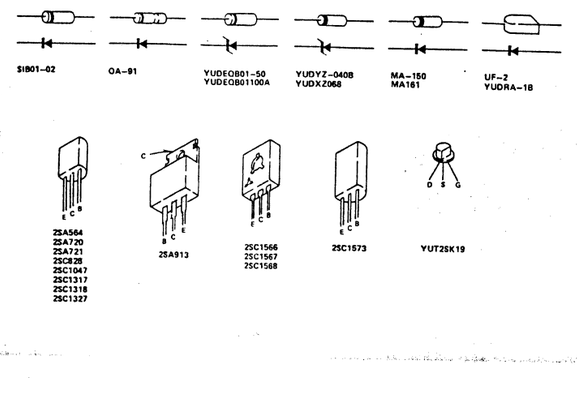
D101 SI801–02 E–9
D102 SI801–02 E–9
D103 SI801–02 D–9
D104 SI801–02 E–9
D105 YUDYZ–0408 E–13
D106 MA–150 C–13
D107 LN21RP –
D201 YUDRA–1B B–6
D202 YUDRA–1B B–6
D203 YUDEQB01100A C–4
D204 YUDEQB01100A C–2
D205 YUDZQB01–50A C–5
D206 YUDRA–1B C–7
D207 YUDEQB01–150 D–4
D208 OA–91 B–9
D209 YUDEQB01100A D–2
D210 MA–161 B–8
D301 OA–91 C–10
D302 UF–2 B–11

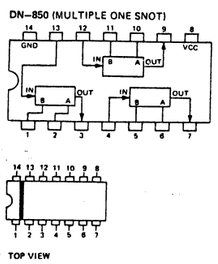
IC501 DN850 B–13
IC502 YWHD7402P D–10
IC503 YWSM6430B E–9

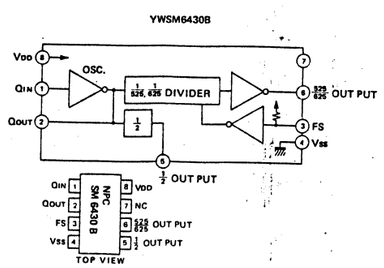
Q501 2SA721 D–10
Q502 2SA721 C–10
Q503 2SC1047–CD B–11
Q504 2SC1047–CD B–10
Q505 2SC1047–CD B–8
Q506 2SC1047–CD B–7
Q507 2SC828–O E–12
Q508 2SA720–RS C–13
Q509 2SA720–RS B–9
Q510 2SC1047–CD C–7
Q511 2SC828–QR B–11
Q512 2SC828–QR E–11
Q513 2SC828–QR E–11
Q601 YUT25K19–GR B–3
Q602 2SC1047–CD C–3
Q603 2SC1047–CD D–3
Q604 2SC1047–CD D–3
Q605 2SA720–RS D–4
Q606 2SC828–QR D–4
Q607 2SC1047–CD C–6
Q608 2SC828–QR D–5
Q610 2SC1317–RS D–7
Q611 2SC828–QR C–6
Q612 2SC1566–QR B–6
Q613 2SC828–QR B–2

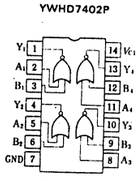
D501 MA–150 D–10
D502 MA–150 C–10
D503 YUDXZ068 D–12
D504 MA–150 C–10
D505 MA–150 B–6
D506 MA–150 C–11
D509 MA–150 B–6
D510 MA–150 B–11
D511 OA–91 B–10
D601 MA–150 E–5
D602 MA–150 D–5
D603 MA–150 D–6
D604 OA–91 B–5
D605 OA–91 B–5

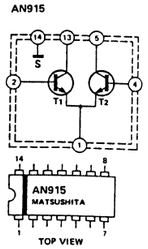
D512 MA–150 E–10

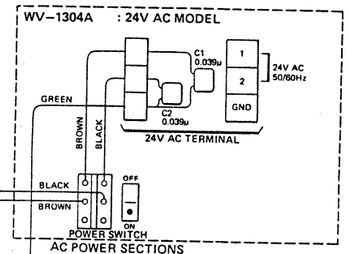


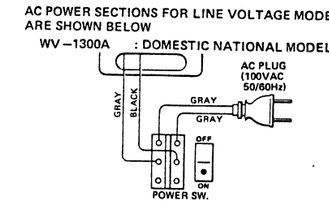


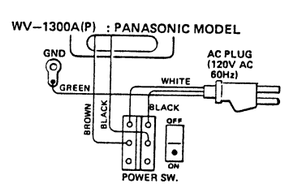


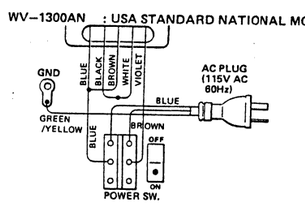


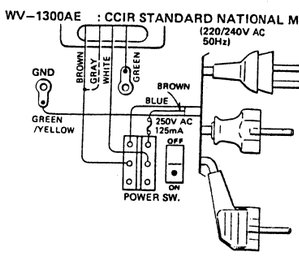


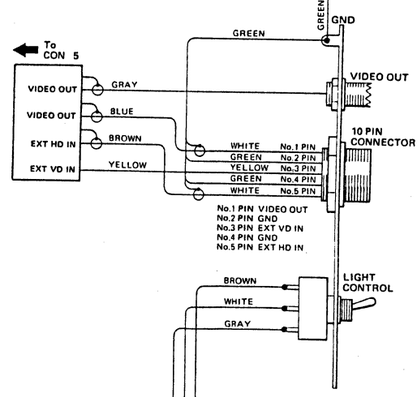




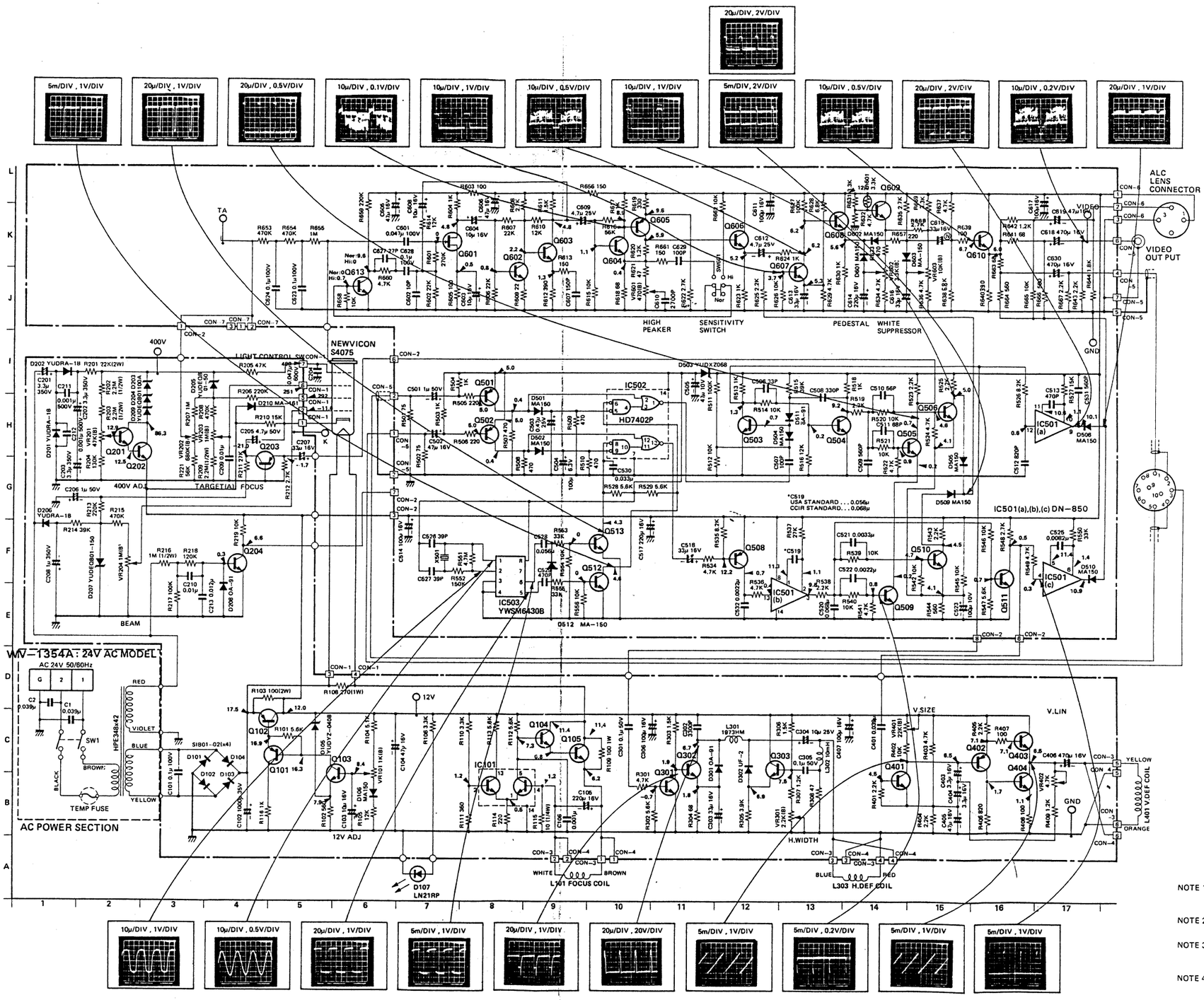








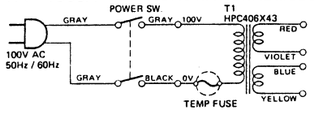
WV-1350A SCHEMATIC DIAGRAM



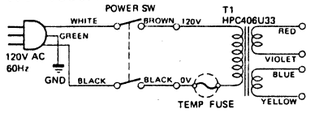
IC101	AN915	B–8
IC501		
(a)	DN850	H–17
(b)	DN850	E–13
(c)	DN850	F–17
IC502	YWHD7402P	H–10
IC503	YWSM6430B	F–8
Q101	2SA564–QR	C–5
Q102	2SA913–QRS	C–6
Q103	2SC828–QR	C–6
Q104	2SC1327–TU	C–9
Q105	2SC1568–RST	C–9
Q201	2SC1573–QR	H–2
Q202	2SC1573–QR	H–2
Q203	2SA720–RS	G–4
Q204	2SC828–QR	F–4
Q301	2SC828–QR	B–11
Q302	2SC1567–QR	C–11
Q303	2SC1318–QR	C–12
Q401	2SC828–QR	B–14
Q402	2SA721	C–16
Q403	2SC1317–RS	C–16
Q404	2SC1317–RS	B–16
Q501	2SA721	H–8
Q502	2SA721	H–8
Q503	2SC1047–CD	H–12
Q504	2SC1047–CD	H–13
Q505	2SC1047–CD	H–15
Q506	2SC1047–CD	H–15
Q508	2SA720–RS	F–12
Q509	2SC1047–CD	E–14
Q510	2SC1047–CD	F–15
Q511	2SC828–QR	F–16
Q512	2SC828–QR	F–10
Q513	2SC828–QR	F–10
Q601	YUT2SK19–GR	K–7
Q602	2SC1047–CD	K–8
Q603	2SC1047–CD	K–9
Q604	2SC1047–CD	K–10
Q605	2SA720–RS	K–10
Q606	2SC828–QR	K–12
Q607	2SC1047–CD	J–13
Q608	2SC828–QR	K–13
Q609	2SC1047–CD	K–14
Q610	2SC1317–RS	K–16
Q613	2SC828–QR	J–6
D101	SIB01–02	C–4
D102	SIB01–02	B–4
D103	SIB01–02	B–4
D104	SIB01–02	C–4
D105	YUDYZ–0408	C–5
D106	MA–150	B–6
D107	LN21RP	A–7
D201	YUDRA–1B	H–1
D202	YUDRA–1B	I–1
D203	YUDEQB01100A	I–2
D204	YUDEQB01100A	H–2
D205	YUDZOB01–50A	I–4
D206	YUDRA–1B	F–1
D207	YUDEQB01–150	F–2
D208	OA–91	E–4
D209	YUDEQB01100A	H–3
D210	MA–161	H–4
D301	OA–91	C–12
D302	UF–2	C–12
D501	MA–150	H–9
D502	MA–150	H–9
D503	YUDXZ068	I–11
D504	MA–150	H–13
D505	MA–150	G–15
D506	MA–150	H–17
D509	MA–150	G–15
D510	MA–150	F–17
D511	MA–150	H–13
D601	MA–150	K–14
D602	MA–150	K–14
D603	MA–150	K–15
D512	MA–150	F–9

AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

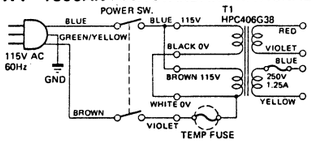
WV–1350A : DOMESTIC NATIONAL MODEL



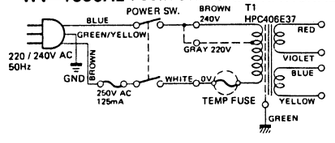
WV–1350A : PANASONIC MODEL



WV–1350AN : USA STANDARD NATIONAL MODEL



WV–1350AE : CCIR STANDARD NATIONAL MODEL



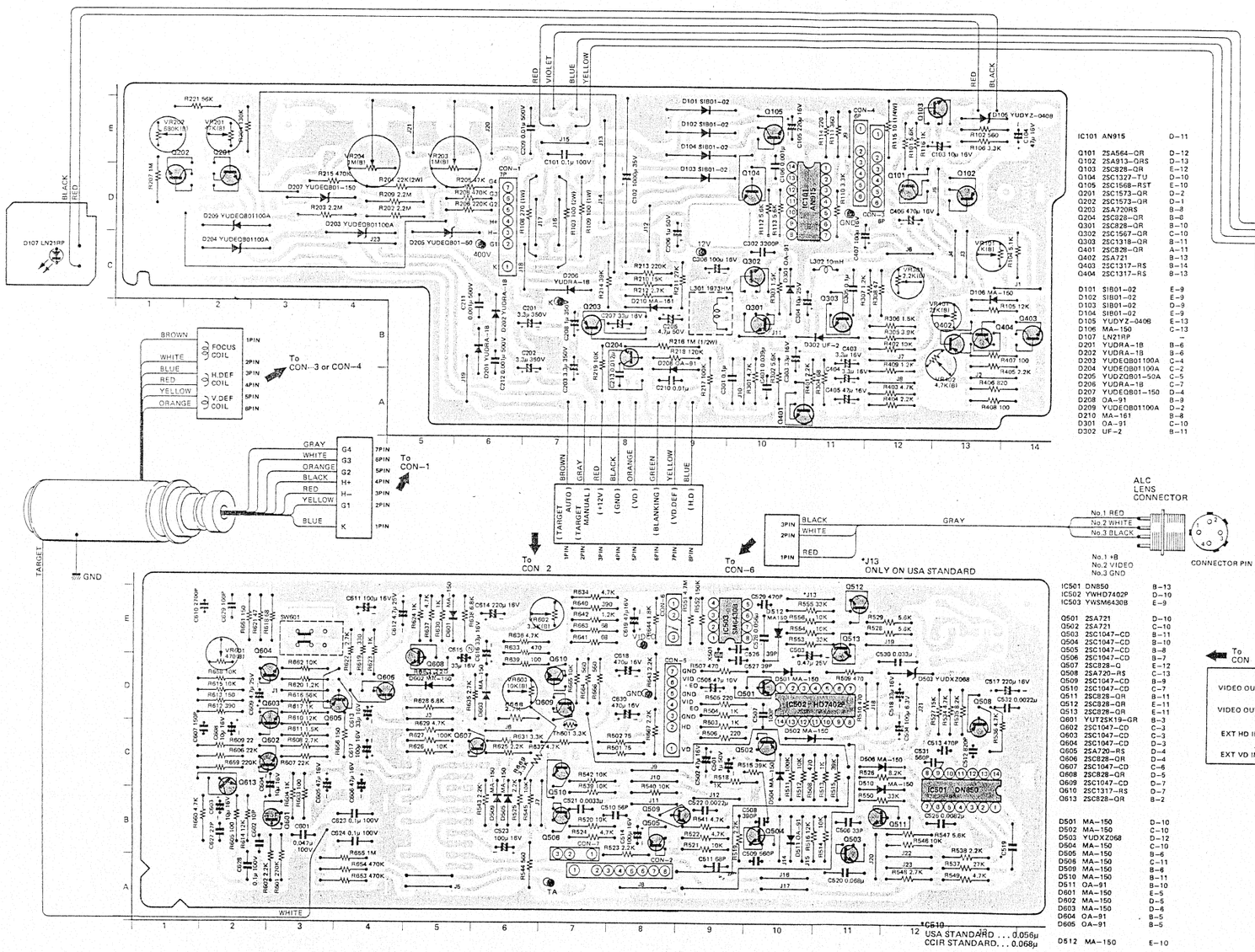
NOTE 1 : Do not order components by Part No. written on schematic diagram or conductor view of P,C,B. Use replacement parts list.

NOTE 2 : DC Voltages are measured with digital voltmeter to chassis.

NOTE 3 : All resistors are in ohms, 1/8W ±5% unless otherwise noted.
K=1000, M=1000K

NOTE 4 : All capacitors are in μF unless otherwise noted.
P=μμF

CONDUCTOR VIEW OF WV-1350A



IC101 AN915 D–11

Q101 2SA564–QR D–12
Q102 2SA913–QRS D–13
Q103 2SC828–QR E–12
Q104 2SC1327–TU D–10
Q105 2SC1568–RST E–10
Q201 2SC1573–QR D–2
Q202 2SC1573–QR D–1
Q203 2SA720RS B–8
Q204 2SC828–QR B–6
Q301 2SC828–QR B–10
Q302 2SC1567–QR C–10
Q303 2SC1318–QR B–11
Q401 2SC828–QR A–11
Q402 2SA721 B–13
Q403 2SC1317–RS B–14
Q404 2SC1317–RS B–13

D101 SI801–02 E–9
D102 SI801–02 E–9
D103 SI801–02 D–9
D104 SI801–02 E–9
D105 YUDYZ–0406 E–13
D106 MA–150 C–13
D107 LN21RP –
D201 YUDRA–1B B–6
D202 YUDRA–1B B–6
D203 YUDEGB01100A C–4
D204 YUDEGB01100A C–2
D205 YUDZGB01–50A C–5
D206 YUDRA–1B C–7
D207 YUDEGB01–150 D–4
D208 OA–91 B–9
D209 YUDEGB01100A D–2
D210 MA–161 B–8
D301 OA–91 C–10
D302 UF–2 B–11

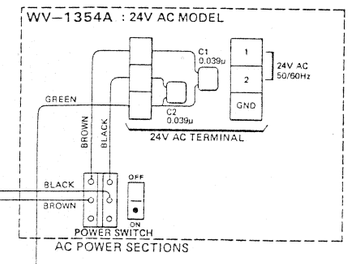
IC501 DN850 B–13
IC502 YWHD7402P D–10
IC503 YWSM6430B E–9

Q501 2SA721 D–10
Q502 2SA721 C–10
Q503 2SC1047–CD B–11
Q504 2SC1047–CD B–10
Q505 2SC1047–CD B–8
Q506 2SC1047–CD B–7
Q507 2SC828–Q E–12
Q508 2SA720–RS C–13
Q509 2SC1047–CD B–9
Q510 2SC1047–CD C–7
Q511 2SC828–QR B–11
Q512 2SC828–QR E–11
Q513 2SC828–QR E–11
Q601 YUT25K19–GR B–3
Q602 2SC1047–CD C–3
Q603 2SC1047–CD C–3
Q604 2SC1047–CD D–3
Q605 2SA720–RS D–4
Q606 2SC828–QR D–4
Q607 2SC1047–CD C–6
Q608 2SC828–QR D–5
Q609 2SC1047–CD D–7
Q610 2SC1217–RS D–7
Q613 2SC828–QR B–2

D501 MA–150 D–10
D502 MA–150 C–10
D503 YUDXZ068 D–12
D504 MA–150 C–10
D505 MA–150 B–6
D506 MA–150 C–11
D509 MA–150 B–6
D510 MA–150 B–11
D511 OA–91 B–10
D601 MA–150 E–5
D602 MA–150 D–5
D603 MA–150 D–6
D604 OA–91 B–5
D605 OA–91 B–5

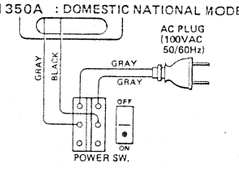
D512 MA–150 E–10

WV–1354A : 24V AC MODEL

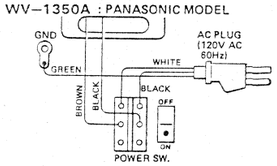


AC POWER SECTIONS FOR LINE VOLTAGE MODELS ARE SHOWN BELOW

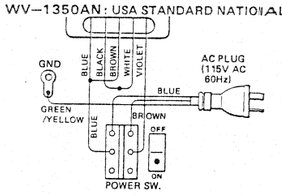
WV–1350A : DOMESTIC NATIONAL MODEL



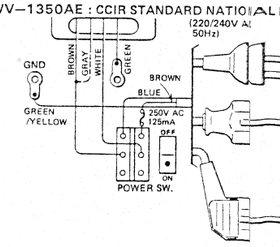
WV–1350A : PANASONIC MODEL

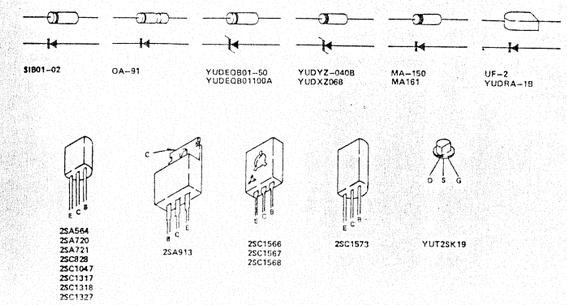


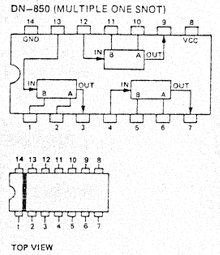
WV–1350AN : USA STANDARD NATIONAL MODEL

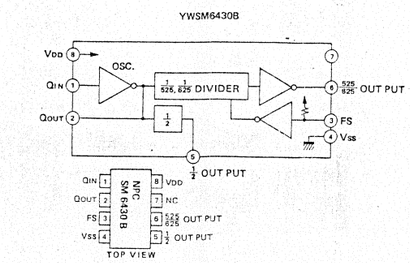


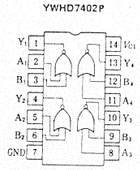
WV–1350AE : CCIR STANDARD NATIONAL MODEL

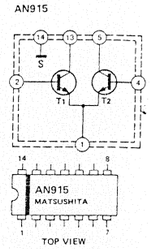




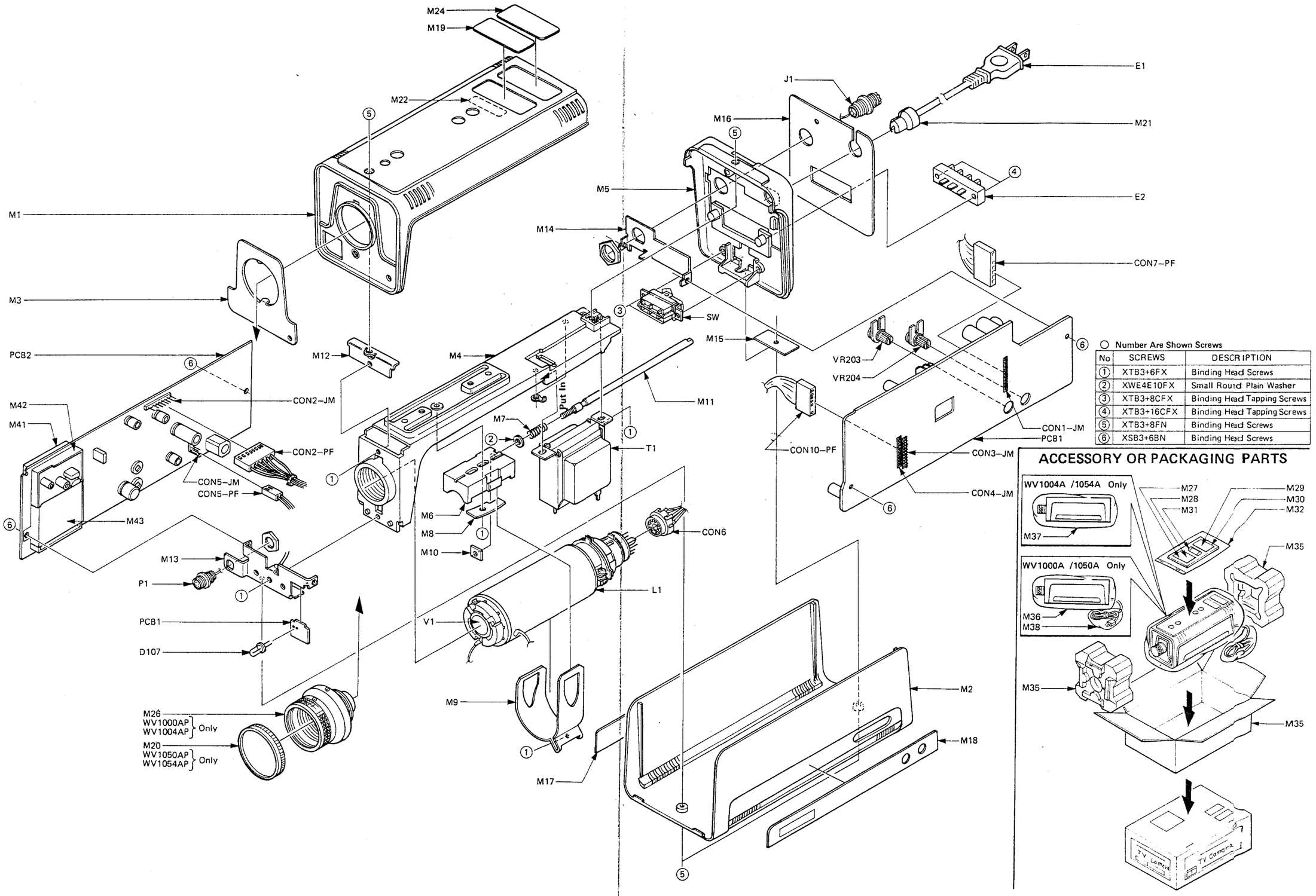








WV-1000A SERIES EXPLODED VIEW AND PACKAGING

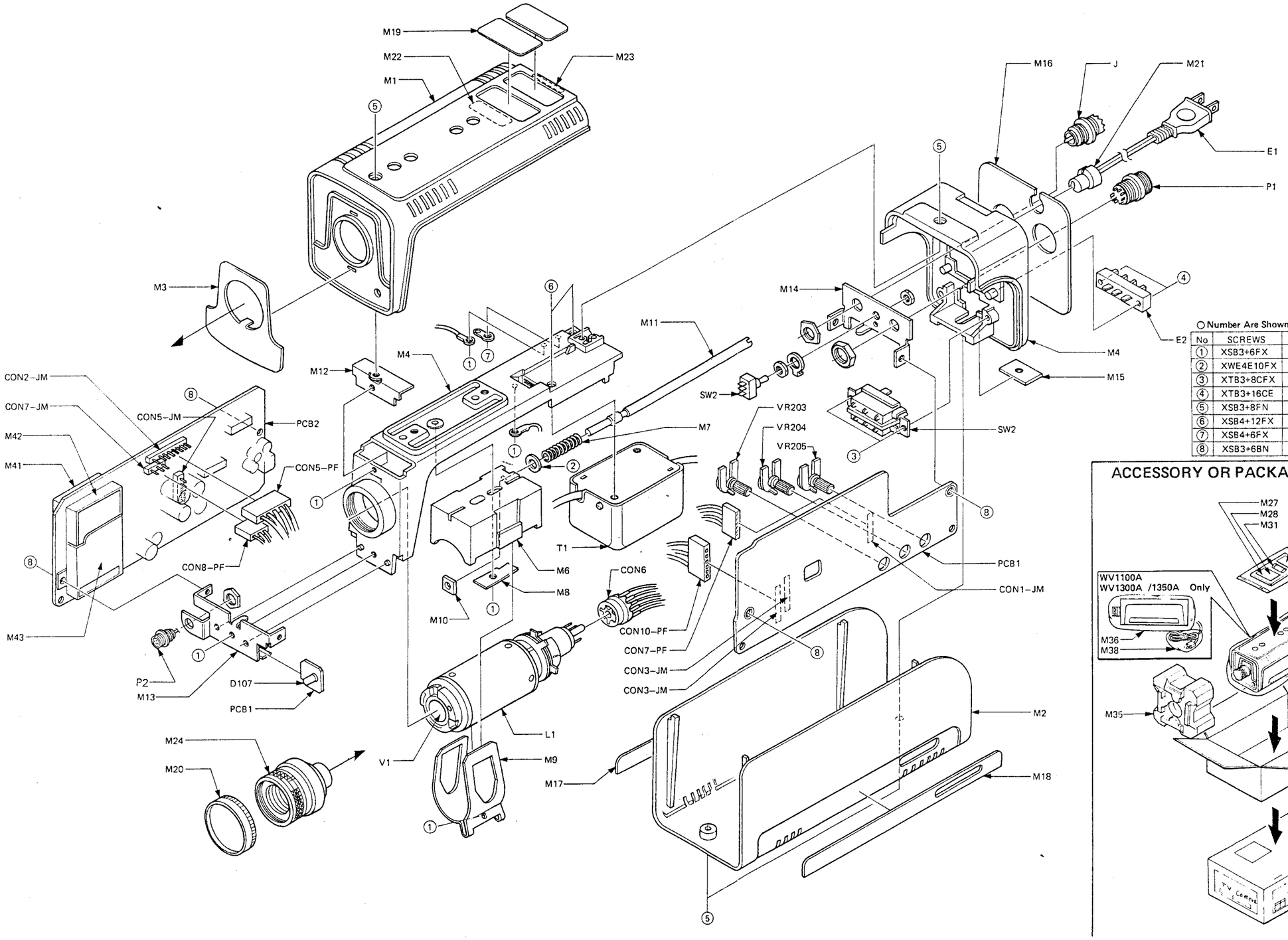


○ Number Are Shown Screws

No	SCREWS	DESCRIPTION
①	XTB3+6FX	Binding Head Screws
②	XWE4E10FX	Small Round Plain Washer
③	XTB3+8CFX	Binding Head Tapping Screws
④	XTB3+16CFX	Binding Head Tapping Screws
⑤	XTB3+8FN	Binding Head Screws
⑥	XSB3+6BN	Binding Head Screws

ACCESSORY OR PACKAGING PARTS

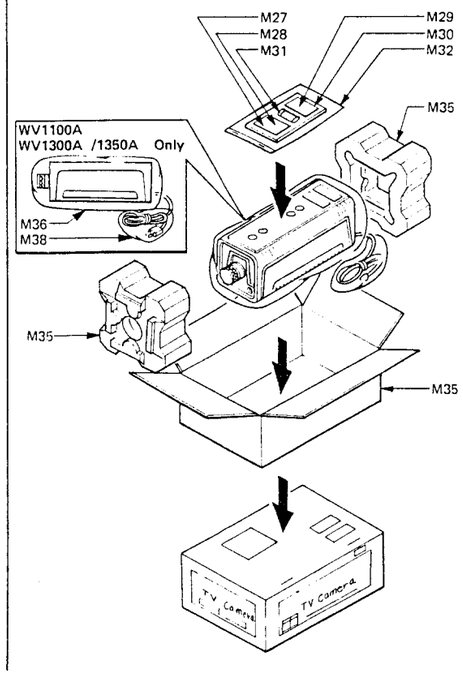
WV-1100A,WV-1300A AND WV-1350A EXPLODED VIEW AND PACKAGING



○ Number Are Shown Screws

No	SCREWS	DESCRIPTION
①	XSB3+6FX	Binding Head Screws
②	XWE4E10FX	Small Round Plain Washer
③	XTB3+8CFX	Binding Head Tapping Screws
④	XTB3+16CE	Binding Head Tapping Screws
⑤	XSB3+8FN	Binding Head Screws
⑥	XSB4+12FX	Binding Head Screws
⑦	XSB4+6FX	Binding Head Screws
⑧	XSB3+6BN	Binding Head Screws

ACCESSORY OR PACKAGING PARTS



REPLACEMENT PARTS LIST

MODELS WV-1000AN/AE,1004AN/AE,1050AN/AE,1054AN/AE

SYM-BOL NO.	PART NO.	DESCRIPTION
MISCELLANEOUS PARTS		
V1	20PE13A-A	Vidicon [WV1000AN/AE/A,B,G Only] [WV1004AN/AE/A,B,G]
	20PE13A0L	Vidicon [WV1000AE/C,1004AE/c Only]
	S4075	New Vicon [WV1050AE/1054AE Only]
L1	ELY-18A009B	Coil Assembly
T1	YWHPE348G36	Power Transformer [WV1000AN/1050AN Only]
	YWHPE348E35	Power Transformer [WV1000AE/1050AE Only]
	YWHPE348X42	Power Transformer [WV1004AN/AE Only] [WV1054AN/AE]
SW1	EST1516	Power Switch
E1	YWV1000NXK02	Power Cord Assembly [WV1000AN/1050AN Only]
	YWKPLTSA-8	Power Cord Assembly [WV1000AE/A,1050AE/A Only]
	YWHBS-3-08	Power Cord Assembly [WV1000AE/B,1050AE/B Only]
	YWHCE-308-DF	Power Cord Assembly [WV1000AE/C,1050AE/C Only]
	YWVM0099-08	Power Cord Assembly [WV1000AE/G,1050AE/G Only]
J1	YWRB-2MI	UHF Jack
E2	YWS-01-3P	Terminal Block 3P [WV1004AN/1054AN Only]
P1	YWSR30-10R4S	Connector for A.L.C. [WV1050AN/1054AN Only]
C1	ECQM4393MZ	Polyester 0.039μF 400V [WV1004AN/1054AN Only]
CON5-PF	YW5047-8	8-Pin Plug-Female
CON6-PF	YWS7-502B-09	Vidicon Tube Socket
CON7-PF	YW5047-7	7-Pin Plug-Female
CON8-PF	YW5047-3	3-Pin Plug-Female
CON9-PF	YW5051-2	2-Pin Plug-Female
CON10-PF	YW5047-6	6-Pin Plug-Female
M1	★YWV1000DR01A	Lower Cover
M2	★YWV1000ADR3A	Upper Cover
M3	★YWV1000UM01B	Front Decoration Panel [WV1000AN/1004AN Only]
	★YWV1050UM01B	Front Decoration Panel [WV1050AN/1054AN Only]
M4	★YWV1000ACM1B	Diecasting Chassis
M5	★YWV1000ADR2B	Rear Plate
M6	★YWV1000ACR1A	Coil Stand
M7	★YWV1000AWM1B	Compression Spring
M8	★YWV1000AWM2A	Plate Spring
M9	★YWV1000AWM3	Coil Belt
M10	★YWV1000ALM2	Nuts Plate
M11	★YWV1000ABM1A	Shaft
M12	★YWV1000AAM1A	Fastening Bracket for Chassis
M13	★YWV1000AAM2A	Fastening Bracket for Circuit Board
M14	★YWV1000AAM3A	Fastening Bracket for Jack
M15	★YWV1000ALM1A	Cover Bracket
M16	★YWV1000AUM2	Rear Decoration Panel [WV1000AN/1050AN Only]
	★YWV1004AUM2	Rear Decoration Panel [WV1004AN/1054AN Only]
M17	★YWV1000UM3	Side Label A
M18	★YWV1000AUM4	Side Label B
M19	YWV1000YUR1	Main Label [WV1000AN Only]
	YWV1004YUR1	Main Label [WV1004AN Only]
	YWV1050YUR1	Main Label [WV1050AN Only]
	YWV1054YUR1	Main Label [WV1054AN Only]
	YWV1000ZUR1	Main Label [WV1000AE Only]
	YWV1004ZUR1	Main Label [WV1004AE Only]
	YWV1050ZUR1	Main Label [WV1050AE Only]
	YWV1054ZUR1	Main Label [WV1054AE Only]
M20	YWBC-2B	Body Cap
M21	YWSR5P-4	Card Bushing [WV1000AN/1050AN Only]
	YWSR6W-1	Card Bushing [WV1000AE/1050AE Only]
M22	YWV1000NUR2	Voltage Labrl Label [WV1000AN/1050AN Only]
M23	YWV240PUB01D	Voltage Serial No. Label
M24	YWV1000UR02	Caution Card

YWV1000AZK1

PCB1	YWV1000AZK1	Printed Circuit Board Assembly
IC101	AN915	Integrated Circuit
Q101	2SA564-QR	Transistor
Q102	2SA913-QRS	Transistor
Q103	2SC828-QR	Transistor
Q104	2SC1327-TU	Transistor
Q105	2SC1568-RST	Transistor
Q201, 202	2SC1573-QR	Transistor
Q203	2SA720-RS	Transistor
Q301	2SC828-QR	Transistor
Q302	2SC1567-QR	Transistor
Q303	2SC1318-QR	Transistor
Q401	2SC828-QR	Transistor
Q402	2SA721	Transistor
Q403 404	2SC1317-RS	Transistor
D101 ~104	SIB01-02	Diode

Parts indicated by (★) are used only for this model at the time this model is introduced.

SYM-BOL NO.	PART NO.	DESCRIPTION		
D105	YUDYZ-040B	Diode		
D106	MA150	Diode		
D107	LN21RP	Diode		
D201, 202	YUDRA-1B	Diode		
D203, 204	YUDEQB01100A	Diode		
D205	YUDEQB01-50	Diode		
D206	YUDRA-1B	Diode		
D207	YUDEQB01-150	Diode		
D209	YUDEQB01100A	Diode		
D210	MA161	Diode		
D301	OA91	Diode		
D302	UF-2	Diode		
R101	ERD18TJ562	Carbon	5.6KΩ	1/8W
R102	ERD18TJ561	Carbon	5.6KΩ	1/8W
R103	ERG2ANJ101	Metal Oxide Film	560Ω	2 W
R104	ERD18TJ512	Carbon	5.1KΩ	1/8W
R105	ERO25CKF1202	Metal-Film	12KΩ	¼ W
R106	ERD18TJ332	Carbon	3.3KΩ	1/8W
R108	ERG1ANJ271	Metal Oxide Film	270Ω	1W
R109	ERG1ANJ101	Metal Oxide Film	100Ω	1W
R110	ERO25CKF3301	Metal Film	3.3KΩ	¼W
R111	ERO25CKF3600	Metal-Film	360Ω	¼W
R112, R113	ERD18TJ470	Carbon	47Ω	1/8W
R114	ERD18TJ221	Carbon	220Ω	1/8W
R115	ERD14FJ100	Carbon	10Ω	¼ W
R116	ERD12FJ105	Carbon	10Ω	½ W
R117	ERD18TJ102	Carbon	1KΩ	1/8W
R201	ERG2ANJ223	Metal Oxide Film	22KΩ	2 W
R202 ~R203	ERO50CKJ225	Metal Film	2.2MΩ	½ W
R204	ERD18TJ134	Carbon	130KΩ	1/8W
R205	ERD18TJ473	Carbon	47KΩ	1/8W
R206	ERD18TJ224	Carbon	220KΩ	1/8W
R207	ERD18TJ824	Carbon	820KΩ	1/8W
R208	ERD18TJ474	Carbon	470KΩ	1/8W
R209	ERO50CKJ225	Metal-Film	2.2MΩ	½ W
R210	ERD18TJ153	Carbon	15KΩ	1/8W
R211	ERD18TJ273	Carbon	27KΩ	1/8W
R212	ERD18TJ272	Carbon	2.7KΩ	1/8W
R213	ERD18TJ224	Carbon	220KΩ	1/8W
R214	ERD18TJ393	Carbon	39KΩ	1/8W
R215	ERD18TJ474	Carbon	470KΩ	1/8W
R221	ERD18TJ563	Carbon	56KΩ	1/8W
R301	ERD18TJ472	Carbon	4.7KΩ	1/8W
R302	ERD18TJ562	Carbon	5.6KΩ	1/8W
R303	ERD18TJ152	Carbon	1.5KΩ	1/8W
R304	ERD18TJ680	Carbon	68Ω	1/8W
R305	ERD18TJ392	Carbon	3.9KΩ	1/8W
R306	ERD18TJ152	Carbon	1.5KΩ	1/8W
R307	ERD18TJ122	Carbon	1.2KΩ	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R308	ERD18TJ470	Carbon	47Ω	1/8W
R401, R402	ERD18TJ103	Carbon	10KΩ	1/8W
R403	ERD18TJ472	Carbon	4.7KΩ	1/8W
R404, R405	ERD18TJ222	Carbon	2.2KΩ	1/8W
R406	ERD18TJ821	Carbon	820Ω	1/8W
R407, R408	ERD18TJ101	Carbon	100Ω	1/8W
R409	ERD18TJ122	Carbon	1.2KΩ	1/8W
VR101	YWCR19R1KB	Variable Resistor	1KΩ	
VR201	YWSR19R47KB	Variable Resistor	47KΩ	
VR202	YWSR19R680KB	Variable Resistor	680KΩ	
VR203, VR204	EVTJ5US10BL6	Semi-fixed Resistor	1MΩ	
VR301	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR401	YWSR19R22KB	Variable Resistor	22KΩ	
VR402	YWSR19R4.7KB	Variable Resistor	4.7KΩ	
C101	YCQMS10104K	Polyester	0.1μF	100V
C102	ECEB1VS102	Electrolytic	1000μF	35V
C103	ECEA1CS100	Electrolytic	10μF	16V
C104	ECEA1CS470	Electrolytic	47μF	16V
C105	ELEA1CS221	Electrolytic	220μF	16V
C106	ECQM1H102KZ	Polyester	0.001μF	50V
C201 ~203	ECEA350V3R3	Electrolytic	3.3μF	350V
C205	ECEA1HS4R7	Electrolytic	4.7μF	50V
C206	ECEA1HS010	Electrolytic	1μF	50V
C207	ECEA1CS330	Electrolytic	33μF	16V
C208	ECEA350V1	Electrolytic	1μF	350V
C209	ECKD2H103PE	Ceramic	10000μF	500V
C211, C212	ECKD2H102KB	Ceramic	1000pF	500V
C301	ECQM1H104KZ	Polyester	0.1μF	50V
C302	ECQS1332JW	Styrol	3300pF	125V
C303	ECSZ16EF33Q	Tantalum	33μF	16V
C304	ECSZ25EF10Q	Tantalum	10μF	25V
C305	ECQM1H104KZ	Polyester	0.1μF	50V
C306	ECEA1CS101	Electrolytic	100μF	16V
C401	ECQM1H683KZ	Polyester	0.068μF	50V
C402	ECQM1H823KZ	Electrolytic	0.082μF	50V
C403, C404	ECSZ16EF3R3Q	Tantalum	3.3μF	16V
C405	ECEA1CS470	Electrolytic	47μF	16V
C406	ECEA16V470	Electrolytic	470μF	16V
C407	ECEA1CS101	Electrolytic	100μF	16V
L301	YWCAN1973HM	Inductance		
L302	YWFL9H103J	Inductance		
CON1 -JM	YW5048-7A	7-Pin Jack-Male		
CON2 -PF	YWV1000AON01	8-Pin Plug-Female		
CON3,4 -JM	YW5048-6A	6-Pin Jack-Male		
M1	YWV10XALM10B	Heat-Sink		

SYM-BOL NO.	PART NO.	DESCRIPTION		
YWV1000AZK2 [WV1000AN/1004AN]				
PCB2	YWV1000AZR2	Printed Circuit Board		
IC501	DN850	Integrated Circuit		
Q501	2SC828-Q	Transistor		
Q502, 503	2SC1047-CD	Transistor		
Q504, 505	2SC828-QR	Transistor		
Q506 ~508	2SC1047-CD	Transistor		
Q601	2SK19-GR	Transistor		
Q602 ~604	2SC1047-CD	Transistor		
Q605	2SA720-RS	Transistor		
Q606	2SC828-QR	Transistor		
Q607	2SC1047-CD	Transistor		
Q608	2SC828-QR	Transistor		
Q610	2SC1317-RS	Transistor		
Q611	2SC828-QR	Transistor		
Q612	2SC1566	Transistor		
D501	MA150	Diode		
D502	OA91	Diode		
D503 ~506	MA150	Diode		
D601 ~603	MA150	Diode		
D604, 605	OA91	Diode		
R501	ERD18TJ333	Carbon	33KΩ	1/8W
R502	ERD18TJ562	Carbon	5.6KΩ	1/8W
R503	ERD18TJ561	Carbon	560Ω	1/8W
R504	ERD18TJ471	Carbon	470Ω	1/8W
R505	ERD18TJ203	Carbon	20KΩ	1/ W
R506	ERD18TJ222	Carbon	2.2KΩ	W
R507, 508	ERD18TJ103	Carbon	10KΩ	1/8W
R509	ERD18TJ472	Carbon	4.7KΩ	1/8W
R510	ERD18TJ222	Carbon	2.2KΩ	1/8W
R511	ERD18TJ472	Carbon	4.7KΩ	1/8W
R512	ERD18TJ222	Carbon	2.2KΩ	1/8W
R513	ERD18TJ103	Carbon	10KΩ	1/8W
R514	ERD18TJ392	Carbon	3.9KΩ	1/8W
R515	ERD18TJ152	Carbon	1.5KΩ	1/8W
R516	ERD18TJ561	Carbon	560Ω	1/8W
R518	ERD18TJ104	Carbon	100KΩ	1/8W
R519	ERD18TJ154	Carbon	150KΩ	1/8W
R520	ERD18TJ104	Carbon	100KΩ	1/8W
R521	ERD18TJ562	Carbon	5.6KΩ	1/8W
R523	ERD18TJ243	Carbon	24KΩ	1/8W
R524	ERD18TJ222	Carbon	22KΩ	1/8W
R525, 526	ERD18TJ103	Carbon	10KΩ	1/8W
R527, 528	ERD18TJ472	Carbon	47KΩ	1/8W
R529	ERD18TJ222	Carbon	2.2KΩ	1/8W
R530	ERD18TJ821	Carbon	820Ω	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R531, 532	ERD18TJ103	Carbon	10KΩ	1/8W
R533	ERD18TJ392	Carbon	3.9KΩ	1/8W
R534	ERD18TJ152	Carbon	1.5KΩ	1/8W
R535	ERD18TJ333	Carbon	33KΩ	1/8W
R601	ERD18TJ274	Carbon	270KΩ	1/8W
R602	ERD18TJ123	Carbon	12KΩ	1/8W
R603	ERD18TJ151	Carbon	150Ω	1/8W
R604	ERD18TJ102	Carbon	1KΩ	1/8W
R605	ERD18TJ101	Carbon	100Ω	1/8W
R606, 607	ERD18TJ223	Carbon	22KΩ	1/8W
R608	ERD18TJ272	Carbon	2.7KΩ	1/8W
R609	ERD18TJ220	Carbon	22Ω	1/8W
R610	ERD18TJ123	Carbon	12KΩ	1/8W
R611	ERD18TJ152	Carbon	1.5KΩ	1/8W
R612	ERD18TJ391	Carbon	390Ω	1/8W
R613	ERD18TJ221	Carbon	220Ω	1/8W
R614	ERD18TJ123	Carbon	12KΩ	1/8W
R615	ERD18TJ103	Carbon	10KΩ	1/8W
R616	ERD18TJ563	Carbon	56KΩ	1/8W
R617	ERD18TJ102	Carbon	1KΩ	1/8W
R618	ERD18TJ680	Carbon	68Ω	1/8W
R619	ERD18TJ331	Carbon	330Ω	1/8W
R620	ERD18TJ122	Carbon	1.2KΩ	1/8W
R621	ERD18TJ470	Carbon	47Ω	1/8W
R622	ERD18TJ272	Carbon	27KΩ	1/8W
R623, 624	ERD18TJ102	Carbon	1KΩ	1/8W
R625	ERD18TJ222	Carbon	2.2KΩ	1/8W
R626	ERD18TJ103	Carbon	10KΩ	1/8W
R627	ERD18TJ104	Carbon	100KΩ	1/8W
R628	ERD18TJ682	Carbon	6.8KΩ	1/8W
R629	ERD18TJ472	Carbon	4.7KΩ	1/8W
R630	ERD18TJ102	Carbon	1KΩ	1/8W
R631	ERD18TJ682	Carbon	6.8KΩ	1/8W
R633	ERD18TJ392	Carbon	3.9KΩ	1/8W
R634	ERD18TJ472	Carbon	4.7KΩ	1/8W
R635	ERD18TJ272	Carbon	2.7KΩ	1/8W
R636	ERD18TJ472	Carbon	4.7KΩ	1/8W
R637	ERD18TJ682	Carbon	6.8KΩ	1/8W
R638	ERD18TJ472	Carbon	4.7KΩ	1/8W
R639	ERD18TJ101	Carbon	100Ω	1/8W
R640	ERD18TJ391	Carbon	390Ω	1/8W
R641	ERD18TJ680	Carbon	68Ω	1/8W
R643	ERD18TJ332	Carbon	3.3KΩ	1/8W
R645	ERD18TJ682	Carbon	6.8KΩ	1/8W
R646	ERD18TJ562	Carbon	5.6KΩ	1/8W
R647	ERD18TJ333	Carbon	33KΩ	1/8W
R648	ERD18TJ332	Carbon	3.3KΩ	1/8W
R649	ERD18TJ331	Carbon	330Ω	1/8W
R650	ERD18TJ562	Carbon	5.6KΩ	1/8W
R651	ERD18TJ472	Carbon	4.7KΩ	1/8W
R652	ERD18TJ334	Carbon	330KΩ	1/8W
R653, 654	ERC14GK106	Solid	10MΩ	1/4W
R655	ERC14GK475	Solid	4.7MΩ	1/4W
VR601	YWSR19R470B	Variable Resistor	470Ω	
VR602	YWSR193-3KB	Variable Resistor	3.3KΩ	

SYM-BOL NO.	PART NO.	DESCRIPTION		
VR603	YWSR19R10KB	Variable Resistor	10KΩ	
C501, C502	ECQS1472JWT	Styrol	4700pF	125V
C503	ECCD1H181K	Ceramic	180pF	50V
C504	ECQS1681JWT	Styrol	680pF	125V
C505	ECQS1471JWT	Styrol	470pF	125V
C506	ECCD1H390K	Ceramic	39pF	50V
C507	ECCD1H560K	Ceramic	56pF	50V
C508	ECQS1221JWT	Styrol	220pF	125V
C509	ECEA1CS101	Electrolytic	100μF	16V
C510	ECQM1H822KZ	Polyester	0.0082μF	50V
C511	ECQM1H563JZ	Polyester	0.056μF	50V
C512	ECQM1H104JZ	Polyester	0.1μF	50V
C513	ECQM1H153KZ	Polyester	0.015μF	50V
C514	ECQM1H222KZ	Polyester	0.0022μF	50V
C515	ECEA1AS221	Electrolytic	220μF	10V
C517	ECQM1H822KZ	Polyester	0.0082μF	50V
C518	ECCD1H560K	Ceramic	56pF	50V
C601	YCQMS10473K	Polyester	0.047μF	100V
C602	ECCD1H080D	Ceramic	8pF	50V
C603, 604	ECEA1CS100	Electrolytic	10μF	16V
C605, 606	ECEA1CS470	Electrolytic	47μF	16V
C607	ECCD1H121K	Ceramic	120pF	50V
C608	ECEA1CS100	Electrolytic	10μF	16V
C609	ECEA1ES4R7	Electrolytic	4.7μF	25V
C610	ECQS1152JWT	Styrol	1500pF	125V
C611	ECEA1CS101	Electrolytic	100μF	16V
C612	ECEA1ES4R7	Electrolytic	4.7μF	25V
C613	ECEA1CS330	Electrolytic	33μF	16V
C614	ECEA1CS221	Electrolytic	220μF	16V
C615	ECEA16N33	Electrolytic	33μF	16V
C616	ECEA1CS330	Electrolytic	33μF	16V
C617	ECEA1CS101	Electrolytic	100μF	16V
C618	ECEA1CS471	Electrolytic	470μF	16V
C620	ECEA1CS100	Electrolytic	10μF	16V
C621	ECEA1HS010	Electrolytic	1μF	50V
C622	ECEA1HS010	Electrolytic	1μF	50V
C623, 624	YCQMS10104K	Polyester	0.1μF	100V
C625	ECEA1CS101	Electrolytic	100μF	16V
C626	ECEA1CS101	Electrolytic	100μF	16V
L501	YWCAN30008R	Inductance		
CON5-JM	YW5045-02A	2-Pin Jack-Male		
CON2-JM	YW5048-8A	8-Pin Jack-Male		
CON3	YW171255-1	Target Pin		
M41	YWV10XALM11B	Shield Plate		
M42	YWV10XALM12A	Shield Plate for Part Side		
M43	YWV10XALM13	Shield Cover		

SYM-BOL NO.	PART NO.	DESCRIPTION		
YWV1050AZK2 [WV1050AN/1054AN]				
PCB2	★ YWV1000AZR2	Printed Circuit Board Assembly		
IC501	DN850	Integrated Circuit		
Q501	2SC828-Q	Transistor		
Q502, 503	2SC1047-CD	Transistor		
Q504, 505	2SC828-QR	Transistor		
Q506 ~508	2SC1047-CD	Transistor		
Q601	2SK19-GR	Transistor		
Q602 ~604	2SC1047-CD	Transistor		
Q605	2SA720-RS	Transistor		
R606	2SC828-QR	Transistor		
Q607	2SC1047-CD	Transistor		
Q608	2SC828-QR	Transistor		
Q609	2SC1047-CD	Transistor		
Q501	MA150	Diode		
D502	OA91	Diode		
D503 ~506	MA150	Diode		
D601 ~603	MA150	Diode		
R501	ERD18TJ332	Carbon	3.3KΩ	1/8W
R502	ERD18TJ562	Carbon	5.6KΩ	1/8W
R503	ERD18TJ561	Carbon	560Ω	1/8W
R504	ERD18TJ471	Carbon	470Ω	1/8W
R505	ERD18TJ203	Carbon	20KΩ	1/8W
R506	ERD18TJ222	Carbon	2.2KΩ	1/8W
R507, 508	ERD18TJ103	Carbon	10KΩ	1/8W
R509	ERD18TJ472	Carbon	4.7KΩ	1/8W
R510	ERD18TJ222	Carbon	2.2KΩ	1/8W
R511	ERD18TJ472	Carbon	4.7KΩ	1/8W
R512	ERD18TJ222	Carbon	2.2KΩ	1/8W
R513	ERD18TJ103	Carbon	10KΩ	1/8W
R514	ERD18TJ392	Carbon	3.9KΩ	1/8W
R515	ERD18TJ152	Carbon	1.5KΩ	1/8W
R516	ERD18TJ561	Carbon	560Ω	1/8W
R517	ERD18TJ103	Carbon	10KΩ	1/8W
R518	ERD18TJ104	Carbon	100KΩ	1/8W
R519	ERD18TJ154	Carbon	150KΩ	1/8W
R520	ERD18TJ104	Carbon	100KΩ	1/8W
R521	ERD18TJ562	Carbon	5.6KΩ	1/8W
R523	ERD18TJ243	Carbon	24KΩ	1/8W
R524	ERD18TJ222	Carbon	22KΩ	1/8W
R525, 526	ERD18TJ100	Carbon	10Ω	1/8W
R527, 528	ERD18TJ472	Carbon	4.7KΩ	1/8W
R529	ERD18TJ222	Carbon	2.2KΩ	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION			SYM-BOL NO.	PART NO.	DESCRIPTION		
R530	ERD18TJ821	Carbon	820Ω	1/8W	R655	ERD18TJ105	Carbon	1MΩ	1/8W
R531, 532	ERD18TJ103	Carbon	10KΩ	1/8W	R656	ERD18TJ101	Carbon	100Ω	1/8W
R533	ERD18TJ392	Carbon	3.9KΩ	1/8W	R657	ERD18TJ221	Carbon	220Ω	1/8W
R534	ERD18TJ152	Caron	1.5KΩ	1/8W	R668	ERD18TJ272	Carbon	2.7KΩ	1/8W
R535	ERD18TJ333	Carbon	33KΩ	1/8W	R669	ERD18TJ332	Carbon	3.3KΩ	1/8W
R601	ERD18TJ274	Carbon	270KΩ	1/8W	TH601	ERTD2FHL332S	Thermistor		
R602	ERD18TJ123	Carbon	12KΩ	1/8W	VR601	YWSR19R470B	Variable Resistor	470Ω	
R603	ERD18TJ151	Carbon	150Ω	1/8W	VR602	YWSR19R3.3KB	Variable Resistor	3.3KΩ	
R604	ERD18TJ102	Carbon	1KΩ	1/8W	VR603	YWSR19R10KB	Variable Resistor	10KΩ	
R605	ERD18TJ101	Carbon	100Ω	1/8W	C501, 502	ECQS1472JWT	Styrol	4700pF	125V
R606, 607	ERD18TJ223	Carbon	22KΩ	1/8W	C503	ECCD1H181K	Ceramic	180pF	50V
R608	ERD18TJ272	Carbon	2.7KΩ	1/8W	C504	ECQS1681JWT	Styrol	680pF	125V
R609	ERD18TJ220	Carbon	22Ω	1/8W	C505	ECQS1471JWT	Styrol	470pF	125V
R610	ERD18TJ123	Carbon	12KΩ	1/8W	C506	ECCD1H390K	Ceramic	39pF	50V
R611	ERD18TJ152	Carbon	1.5KΩ	1/8W	C507	ECCD1H560K	Ceramic	56pF	50V
R612	ERD18TJ391	Carbon	390Ω	1/8W	C508	ECQS1221JWT	Styrol	220pF	125V
R613	ERD18TJ221	Carbon	220Ω	1/8W	C509	ECEA1CS101	Electrolytic	100μF	16V
R614	ERD18TJ123	Carbon	12KΩ	1/8W	C510	ECQM1H822KZ	Polyester	0.0082μF	50V
R615	ERD18TJ103	Carbon	10KΩ	1/8W	C511	ECQM1H563JZ	Polyester	0.056μF	50V
R616	ERD18TJ563	Carbon	56KΩ	1/8W	C512	ECQM1H104JZ	Polyester	0.1μF	50V
R617	ERD18TJ102	Carbon	1KΩ	1/8W	C513	ECQM1H153KZ	Polyester	0.015μF	50V
R618	ERD18TJ680	Carbon	68Ω	1/8W	C514	ECQM1H222KZ	Polyester	0.0022μF	50V
R619	ERD18TJ331	Carbon	330Ω	1/8W	C515	ECEA1AS221	Electrolytic	220μF	10V
R620	ERD18TJ122	Carbon	1.2KΩ	1/8W	C517	ECQM1H822KZ	Polyester	0.0082μF	50V
R621	ERD18TJ470	Carbon	47Ω	1/8W	C518	ECCD1H560K	Ceramic	56μF	50V
R622	ERD18TJ272	Carbon	2.7KΩ	1/8W	C601	YCQMS10473K	Polyester	0.047μF	100V
R623, 624	ERD18TJ102	Carbon	1KΩ	1/8W	C602	ECCD1H100D	Ceramic	10μF	50V
R625	ERD18TJ222	Carbon	2.2KΩ	1/8W	C603, 604	ECEA1CS100	Electrolytic	10μF	16V
R626	ERD18TJ103	Carbon	10KΩ	1/8W	C605, 606	ECEA1CS470	Electrolytic	47μF	16V
R627	ERD18TJ104	Carbon	100KΩ	1/8W	C607	ECCD1H121K	Ceramic	120μF	50V
R628	ERD18TJ682	Carbon	6.8KΩ	1/8W	C608	ECEA1CS100	Electrolytic	10μF	16V
R629	ERD18TJ472	Carbon	4.7KΩ	1/8W	C609	ECEA1ES4R7	Electrolytic	4.7Ω	25V
R630	ERD18TJ102	Carbon	1KΩ	1/8W	C610	ECQS1152JWT	Styrol	1,500pF	125V
R631	ERD18TJ332	Carbon	3.3KΩ	1/8W	C611	ECEA1CS101	Electrolytic	100μF	16V
R632	ERD18TJ472	Carbon	4.7KΩ	1/8W	C612	ECEA1ES4R7	Electrolytic	4.7μF	25V
R633	ERD18TJ471	Carbon	470Ω	1/8W	C613	ECEA1CS330	Electrolytic	33μF	16V
R634	ERD18TJ472	Carbon	4.7KΩ	1/8W	C614	ECEA1CS221	Electrolytic	220μF	16V
R635	ERD18TJ272	Carbon	2.7KΩ	1/8W	C615	ECEA16N33	Electrolytic	33μF	16V
R636	ERD18TJ472	Carbon	4.7KΩ	1/8W	C616	ECEA1CS330	Electrolytic	33μF	16V
R637	ERD18TJ682	Carbon	6.8KΩ	1/8W	C617	ECEA1CS101	Electrolytic	100μF	16V
R638	ERD18TJ472	Carbon	4.7KΩ	1/8W	C618	ECEA1CS471	Electrolytic	470μF	16V
R639	ERD18TJ101	Carbon	100Ω	1/8W	C619	ECEA1CS470	Electrolytic	47μF	16V
R640	ERD18TJ391	Carbon	390Ω	1/8W	C623, 624	YCQMS10104K	Polyester	0.1μF	100V
R641	ERD18TJ680	Carbon	68Ω	1/8W	C625	ECEA1CS101	Electrolytic	100μF	16V
R642	ERD18TJ122	Carbon	1.2KΩ	1/8W	C626	ECEA1CS101	Electrolytic	100μF	16V
R643	ERD18TJ332	Carbon	3.3KΩ	1/8W	L501	YWCAN30008R	Inductance		
R644	ERD18TJ182	Carbon	1.8KΩ	1/8W	CON1	YW5045-02A	2-Pin Plug-Female		
R653, 654	ERD18TJ474	Carbon	470KΩ	1/8W					

SYM-BOL NO.	PART NO.	DESCRIPTION
CON2	YW5048-8A	8-Pin Jack-Male
CON3	YW5048-03A	3-Pin
CON4	YW171255-1	Target Pin
M41	YWV10XALM11B	Shield Plate
M42	YWV10XALM12A	Shield Plate for Part Side
M43	YWV10XALM13	Shield Cover
YWV1000YZK3[WV1000AN/AE,1050AN/AE]		
PCB4	YWV1000YZK3	Printed Circuit Board Assembly
F	TWTS1R25A	Fuse
	TWTS125MA	Fuse
E1	YWSN5053	Fuse Holder
E2	YWT-028	Tep
ACCESSORY PARTS		
P2	MS-YA	Coaxial Connector
P3	YWA5	Adapter
M27	YWV1000YRB1	Instruction Book [WV1000AN/AE Only WV1004AN/AE]
	YWV1050YRB1	Instruction Book [WV1050AN/AE Only WV1054AN/AE]
M28	W-B-RB01	Warranty Card [WV1000AE/B,1050AE/B Only]
M29	YW-BCG-UR01	Label A [WV1000AE/1050AE Only]
M30	YWV1000AUR2	National Label
M31	YWEP10	Lens Cleaner [WV1050AN/AE Only WV1054AN/AE]
M32	YWT20X35C03	Plastic Bag
M33	YWT10X10C03	Plastic Bag for Connector
M34	YW-B-UR01	Label B [WV1000AE/B,1050AE/B Only]
PACKAGING PARTS		
M35	YWV1000YPB1	Packaging Case Complate
M36	YWT25X60X3	Plastic Bag [WV1000AN/AE Only WV1050AN/AE]
M37	XZB26X40C05	Plastic Bag [WV1004AN/AE Only WV1054AN/AE]
M38	YWT20X35C03	Plastic Bag for Cavle

SYM-BOL NO.	PART NO.	DESCRIPTION

REPLACEMENT PARTS LIST

MODELS WW1100AN/AE, 1300AN/AE, 1350AN/AE

SYM-BOL NO.	PART NO.	DESCRIPTION
	MISCELLANEOUS PARTS	
V1	20PE13A-A	Vidicon [WV1100AN/AE/A,B,G, Only WV1300AN/AE/A,B,G]
	20PE13A0L	Vidicon [WV1100AE/C,1300AE/C Only]
	S4075	New Vicon [WV1350AN/AE Only]
L1	ELY18A009B	Coil Assembly
T1	YWHPC406G38	Power Transformer [WV1100AN/1300AN Only WV1350AN]
	YWHPC406E37	Power Transformer [WV1100AE/1300AE Only WV1350AE]
SW1	EST1516	Power Switch
SW2	YWHS-1DG	Change-Over Switch [WV1100AN/AE,1300AN/AE Only]
	YWV1000NXK02	Power Cord Assembly [WV1100AN/1300AN Only WV1350AN]
	YWKPLTSA-8	Power Cord Assembly [WV1100AE/A,1300AE/A Only WV1350AE/A]
E1	YWHBS-3-08	Power Cord Assembly [WV1100AE/B,1300AE/B Only WV1350AE/B]
	YWHCE-308-DF	Power Cord Assembly [WV1100AE/C,1300AE/C Only WV1350AE/C]
	YWVM0099-08	Power Cord Assembly [WV1100AE/G,1300AE/G Only WV1350AE/G]
E2	YWS-01-3P	Terminal Block 3P
J	YWRB-2MI	U.H.F. Jack
P1	RM15TRD-10SU	10G-Connector
P2	YWSR30-10R4S	Connector for ALC [WV1350AN/AE Only]
CON5-PF	YW5047-8	8-Pin Plug-Female
CON6	YWS7-502B-09	Vidicon Tube Socket
CON7-PF	YW5047-7	7-Pin Plug-Female
CON8-PF	YW5047-3	3-Pin Plug-Female
CON10-PF	YW5047-6	6-Pin Plug-Female
M1	YWV1000DR01A	Lower Cover
M2	★YWV1100ADR3	Upper Cover
M3	★YWV1000UM01B	Front Decoration Panel [WV1100AN/AE Only WV1300AN/AE]
	★YWV1050UM01B	Front Decoration Panel [WV1350AN/AE Only]
M4	★YWV1000ACM1B	Diecasting Chassis
M5	YWV1100ADR2A	Rear Plate
M6	YWV1000ACR1A	Coil Stand
M7	YWV1000AWM1B	Compression Spring
M8	YWV1000AWM2A	Plate Spring
M9	YWV1000AWM3	Coil Belt
M10	YWV1000ALM2	Nuts Plate
M11	★YWV1100ABM1	Shaft
M12	★YWV1000AAM1A	Fastening Bracket for Chassis
M13	★YWV1000AAM2A	Fastening Bracket for Circuit Board
M14	★YWV1100AAM1	Fastening Bracket for Jack
M15	YWV1000ALM1A	Cover Bracket
M16	★YWV1100AUM2	Rear Decoration Panel [WV1100AN/AE Only WV1300AN/AE]
	★YWV1150AUM2	Rear Decoration Panel [WV1350AN/AE Only]
M17	★YWV1100YUM3	Side Label A [WV1100AN/AE Only]
	★YWV1300YUM3	Side Label A [WV1300AN/AE Only WV1350AN/AE]
M18	★YWV1100YUM4	Side Label B [WV1100AN/AE Only]
	★YWV1300YUM4	Side Label B [WV1300AN/AE Only]
	★YWV1350YUM4	Side Label B [WV1350AN/AE Only]
M19	★YWV1100YUR1	Main Label [WV1100AN Only]
	★YWV1300YUR1	Main Label [WV1300AN Only]
	★YWV1350YUR1	Main Label [WV1350AN Only]
	★YWV1100ZUR1	Main Label [WV1100AE Only]
	★YWV1300ZUR1	Main Label [WV1300AE Only]
	★YWV1350ZUR1	Main Label [WV1350AE Only]
M20	YWBC-2B	Body Cap [WV1300AN/AE Only]
M21	YWSR5P-4	Cord Bushing [WV1100AN/1300AN Only WV1350AN]
	YWSR6W-1	Cord Bushing [WV1100AE/1300AE Only WV1350AE]
M22	YWS-CULRB02A	System Label
M23	YWV240PUB01D	Serial No. Label
	YWV1100AZK1 [WV1100AN/AE,1300AN/AE]	
PCB1	★YWV1100AZK1	Printed Circuit Board Assembly
IC	AN915	Integrated Circuit
Q101	2SA564-QR	Transistor
Q102	2SA913-QRS	Transistor
Q103	2SC828-QR	Transistor
Q104	2SC1327-TU	Transistor
Q105	2SC1568-RST	Transistor

Parts indicated by (★) are used only for this model at the time this model is introduced.

SYM-BOL NO.	PART NO.	DESCRIPTION		
Q201, 202	2SC1573-QR	Transistor		
Q203	2SA720-RS	Transistor		
Q204	2SC828-QR	Transistor		
Q301	2SC828-QR	Transistor		
Q302	2SC1567-QR	Transistor		
Q303	2SC1318-QR	Transistor		
Q401	2SC828-QR	Transistor		
Q402	2SA721	Transistor		
Q403, 404	2SC1317-RS	Transistor		
D101 ~104	SIB01-02	Diode		
D105	YUDYZ-040B	Diode		
D106	MA150	Diode		
D107	LN21RP	Light Emitting Diode		
D201, 202	YUDRA-1B	Diode		
D203, 204	YUDEQB01100A	Diode		
D205	YUDEQB01-50	Diode		
D206	YUDRA-1B	Diode		
D207	YUDEQB01-150	Diode		
D208	OA91	Diode		
D209	YUDEQB01100A	Diode		
D210	MA161	Diode		
D301	OA91	Diode		
D302	UF-2	Diode		
R101	ERD18TJ562	Carbon	5.6KΩ	1/8W
R102	ERD18TJ561	Carbon	560Ω	1/8W
R103	ERG2ANJ101	Metal-Oxide	100Ω	2W
R104	ERD18TJ512	Carbon	5.1KΩ	1/8W
R105	ERO25CKF1202	Metal Film	12KΩ	1/4W
R106	ERD18TJ332	Carbon	3.3KΩ	1/8W
R108	ERG1ANJ271	Metal Oxide	270Ω	1W
R109	ERG1ANJ101	Metal Oxide	100Ω	1W
R110	ERO25CKF3301	Metal Film	3.3KΩ	1/4W
R111	ERO25CKF3600	Metal Film	360Ω	1/4W
R112, 113	ERD18TJ562	Carbon	5.6KΩ	1/8W
R114	ERD18TJ221	Carbon	200Ω	1/8W
R115	ERD14FJ100	Carbon	10Ω	1/4W
R116	ERD18TJ102	Carbon	1KΩ	1/8W
R201	ERG2ANJ223	Metal Oxide	22KΩ	2W
R202, 203	ERO50CKJ225	Metal Film	2.2MΩ	1/2W
R204	ERO25CKF1303	Metal Film	130KΩ	1/4W
R205	ERD18TJ473	Carbon	47KΩ	1/8W
R206	ERD18TJ224	Carbon	220KΩ	1/8W
R207	ERD18TJ105	Carbon	1MΩ	1/8W
R208	ERD18TJ474	Carbon	470KΩ	1/8W
R209	ERO50CKJ225	Metal Film	2.2MΩ	1/2W
R210	ERD18TJ153	Carbon	15KΩ	1/8W
R211	ERD18TJ273	Carbon	27KΩ	1/8W
R212	ERD18TJ272	Carbon	2.7KΩ	1/8W
R213	ERD18TJ224	Carbon	220KΩ	1/8W
R214	ERD18TJ393	Carbon	39KΩ	1/8W
R215	ERD18TJ474	Carbon	470KΩ	1/8W
R216	ERO12FJ105	MetalFilm	1MΩ	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R217	ERD18TJ104	Carbon	100KΩ	1/8W
R218	ERD18TJ124	Carbon	120KΩ	1/8W
R219	ERD18TJ103	Carbon	10KΩ	1/8W
R220	ERC14GK475	Solid	4.7MΩ	1/4W
R221	ERD18TJ563	Carbon	56KΩ	1/8W
R301	ERD18TJ472	Carbon	4.7KΩ	1/8W
R302	ERD18TJ562	Carbon	5.6KΩ	1/8W
R303	ERD18TJ152	Carbon	1.5KΩ	1/8W
R304	ERD18TJ680	Carbon	68Ω	1/8W
R305	ERD18TJ392	Carbon	3.9KΩ	1/8W
R306	ERD18TJ152	Carbon	1.5KΩ	1/8W
R307	ERD18TJ122	Carbon	1.2KΩ	1/8W
R308	ERD18TJ470	Carbon	47Ω	1/8W
R401	ERD18TJ222	Carbon	2.2KΩ	1/8W
R402	ERD18TJ103	Carbon	10KΩ	1/8W
R403	ERD18TJ472	Carbon	4.7KΩ	1/8W
R404, 405	ERD18TJ222	Carbon	2.2KΩ	1/8W
R406	ERD18TJ821	Carbon	820Ω	1/8W
R407, 408	ERD18TJ101	Carbon	100Ω	1/8W
R409	ERD18TJ122	Carbon	1.2KΩ	1/8W
VR101	YWCR19R1KB	Variable Resistor	1KΩ	
VR201	YWSR19R47KB	Variable Resistor	47KΩ	
VR202	YWSR19R680KB	Variable Resistor	680KΩ	
VR203 ~205	EVTJ5US10B16	Variable Resistor	1MΩ	
VR301	YWSR19R2.2KB	Variable Resistor	2.2KΩ	
VR401	YWSR19R22KB	Variable Resistor	22KΩ	
VR402	YWSR19R4.7KB	Variable Resistor	4.7KΩ	
C101	YCQMS10104K	Polyester	0.1μF	100V
C102	ECEB1VS102	Electrolytic	1000μF	35V
C103	ECEA1CS100	Electrolytic	10μF	16V
C104	ECEA1CS470	Electrolytic	47μF	16V
C105	ECEA1CS221	Electrolytic	220μF	16V
C106	ECQM1H102KZ	Polyester	0.001μF	50V
C201 ~203	ECEA350V3R3U	Electrolytic	3.3μF	350V
C205	ECEA1HS4R7	Electrolytic	4.7μF	50V
C206	ECEA1HS010	Electrolytic	1μF	50V
C207	ECEA1CS330	Electrolytic	33μF	16V
C208	ECEA350V1	Electrolytic	1μF	350V
C209	ECKD2H102KB	Ceramic	1000pF	500V
C210	ECQM1H103KZ	Polyester	0.01μF	50V
C211, ~212	ECKD2H102KB	Ceramic	1000pF	500V
C213	ECQM1H123KZ	Polyester	0.012μF	50V
C301	ECQM1H104KZ	Polyester	0.1μF	50V
C302	ECQS1332JWT	Styrol	3300pF	125V
C303	ECSZ16EF33Q	Tantalun	33μF	16V
C304	ECSZ25EF10Q	Tantalun	10μF	25V
C305	ECQM1H104KZ	Polyester	0.1μF	50V
C306	ECEA1CS101B	Electrolytic	100μF	16V
C401	ECQM1H393KZ	Polyester	0.039μF	50V

SYM-BOL NO.	PART NO.	DESCRIPTION		
C403, 404	ECSZ16EF3R3Q	Tantalun	3.3μF	16V
C405	ECEA1CS470B	Electrolytic	47μF	16V
C406	ECEA16V470X	Electrolytic	470μF	16V
C407	ECEA1CS101B	Electrolytic	100μF	16V
L301	YWCAN1973HM	Inductance		
L302	YWFL9H103J	Inductance		
CON1-JM	YW5048-7A	7-Pin Jack Male		
CON2-PF	YWV1000AON01	8-Pin Plug Female		
CON3-JM, CON4-JM	YW5048-6A	6-Pin Jack Male		
M1	YWV10XALM10B	Heat-Sink		

YWV1100AZK2 [WV1100AN/AE]

PCB2	* YWV1100AZK2	Printed Circuit Board Assembly
IC501	DN850	Integrated Circuit
IC502	YWHD7402P	Integrated Circuit
Q501, 502	2SA721	Transistor
Q503 ~506	2SC1047-CD	Transistor
Q507	2SC828-Q	Tramsistor
Q508	2SA720-RS	Transistor
Q509, 510	2SC1047-CD	Transistor
Q511	2SC828-QR	Transistor
Q601	2SK19-GR	Transistor
Q602 ~604	2SC1047-CD	Transistor
Q605	2SA720-RS	Transistor
Q606	2SC828-QR	Transistor
Q607	2SC1047-CD	Transistor
Q608	2SC828-QR	Transistor
Q610	2SC1317-RS	Transistor
Q611	2SC828-QR	Transistor
Q612	2SC1566-QR	Transistor
Q613	2SC828-QR	Transistor
D501, 502	MA150	Diode
D503	YUDXZ068	Diode
D504 ~510	MA150	Diode
D511	OA91	Diode

SYM-BOL NO.	PART NO.	DESCRIPTION		
D601 ~603	MA150	Diode		
D604 ~605	OA91	Diode		
R501, 502	ERD18TJ750	Carbon	75Ω	1/8W
R503, 504	ERD18TJ102	Carbon	1KΩ	1/8W
R505, 506	ERD18TJ221	Carbon	220Ω	1/8W
R507, ~510	ERD18TJ471	Carbon	470Ω	1/8W
R511	ERD18TJ104	Carbon	100KΩ	1/8W
R512	ERD18TJ103	Carbon	10KΩ	1/8W
R513	ERD18TJ102	Carbon	1KΩ	1/8W
R514	ERD18TJ103	Carbon	10KΩ	1/8W
R515	ERD18TJ393	Carbon	39KΩ	1/8W
R516	ERD18TJ123	Carbon	12KΩ	1/8W
R517	ERD18TJ273	Carbon	27KΩ	1/8W
R518	ERD18TJ102	Carbon	1KΩ	1/8W
R519	ERD18TJ222	Carbon	2.2KΩ	1/8W
R520, 521	ERD18TJ103	Carbon	10KΩ	1/8W
R522	ERD18TJ472	Carbon	4.7KΩ	1/8W
R523	ERD18TJ222	Carbon	2.2KΩ	1/8W
R524	ERD18TJ472	Carbon	4.7KΩ	1/8W
R525	ERD18TJ222	Carbon	2.2KΩ	1/8W
R526	ERD18TJ822	Carbon	8.2KΩ	1/8W
R527	ERD18TJ153	Carbon	15KΩ	1/8W
R528, 529	ERD18TJ562	Carbon	5.6KΩ	1/8W
R530	ERD18TJ333	Carbon	33KΩ	1/8W
R531	ERD18TJ562	Carbon	5.6KΩ	1/8W
R532	ERD18TJ561	Carbon	560Ω	1/8W
R533	ERD18TJ471	Carbon	470Ω	1/8W
R534	ERD18TJ472	Carbon	4.7KΩ	1/8W
R535	ERD18TJ822	Carbon	8.2KΩ	1/8W
R536	ERD18TJ472	Carbon	4.7KΩ	1/8W
R537	ERD18TJ273	Carbon	27KΩ	1/8W
R538	ERD18TJ222	Carbon	2.2KΩ	1/8W
R539, 540	ERD18TJ103	Carbon	10KΩ	1/8W
R541	ERD18TJ472	Carbon	4.7KΩ	1/8W
R542	ERD18TJ103	Carbon	10KΩ	1/8W
R543	ERD18TJ222	Carbon	2.2KΩ	1/8W
R544	ERD18TJ561	Carbon	560Ω	1/8W
R545, 546	ERD18TJ103	Carbon	10KΩ	1/8W
R547	ERD18TJ562	Carbon	5.6KΩ	1/8W
R548	ERD18TJ272	Carbon	2.7KΩ	1/8W
R549	ERD18TJ472	Carbon	4.7KΩ	1/8W
R550	ERD18TJ333	Carbon	33KΩ	1/8W
R601	ERD18TJ274	Carbon	270KΩ	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R602	ERD18TJ223	Carbon	22KΩ	1/8W
R603	ERD18TJ101	Carbon	100Ω	1/8W
R604	ERD18TJ102	Carbon	1KΩ	1/8W
R605	ERD18TJ101	Carbon	100Ω	1/8W
R606, 607	ERD18TJ223	Carbon	22KΩ	1/8W
R608	ERD18TJ272	Carbon	2.7KΩ	1/8W
R609	ERD18TJ220	Carbon	22Ω	1/8W
R610	ERD18TJ123	Carbon	12KΩ	1/8W
R611	ERD18TJ152	Carbon	1.5KΩ	1/8W
R612	ERD18TJ391	Carbon	390Ω	1/8W
R613	ERD18TJ151	Carbon	150Ω	1/8W
R614	ERD18TJ123	Carbon	12KΩ	1/8W
R615	ERD18TJ103	Carbon	10KΩ	1/8W
R616	ERD18TJ563	Carbon	56KΩ	1/8W
R617	ERD18TJ102	Carbon	1KΩ	1/8W
R618	ERD18TJ680	Carbon	68Ω	1/8W
R619	ERD18TJ331	Carbon	330Ω	1/8W
R620	ERD18TJ122	Carbon	1.2KΩ	1/8W
R621	ERD18TJ470	Carbon	47Ω	1/8W
R622	ERD18TJ272	Carbon	2.7KΩ	1/8W
R623, 624	ERD18TJ102	Carbon	1KΩ	1/8W
R625	ERD18TJ222	Carbon	2.2KΩ	1/8W
R626	ERD18TJ103	Carbon	10KΩ	1/8W
R627	ERD18TJ104	Carbon	100KΩ	1/8W
R628	ERD18TJ682	Carbon	6.8KΩ	1/8W
R629	ERD18TJ472	Carbon	4.7KΩ	1/8W
R630	ERD18TJ102	Carbon	1KΩ	1/8W
R633	ERD18TJ392	Carbon	3.9KΩ	1/8W
R634	ERD18TJ472	Carbon	4.7KΩ	1/8W
R635	ERD18TJ272	Carbon	2.7KΩ	1/8W
R636	ERD18TJ472	Carbon	4.7KΩ	1/8W
R637	ERD18TJ682	Carbon	6.8KΩ	1/8W
R638	ERD18TJ472	Carbon	4.7KΩ	1/8W
R639	ERD18TJ101	Carbon	100Ω	1/8W
R640	ERD18TJ391	Carbon	390Ω	1/8W
R641	ERD18TJ680	Carbon	68Ω	1/8W
R643	ERD18TJ222	Carbon	2.2KΩ	1/8W
R645	ERD18TJ682	Carbon	6.8KΩ	1/8W
R646	ERD18TJ562	Carbon	5.6KΩ	1/8W
R647	ERD18TJ333	Carbon	33KΩ	1/8W
R648	ERD18TJ332	Carbon	3.3KΩ	1/8W
R649	ERD18TJ331	Carbon	330Ω	1/8W
R650	ERD18TJ562	Carbon	5.6KΩ	1/8W
R651	ERD18TJ472	Carbon	4.7KΩ	1/8W
R652	ERD18TJ334	Carbon	330KΩ	1/8W
R653, 654	ERC14GK106	Solid	10MΩ	1/4W
R655	ERD18TJ105	Carbon	1MΩ	1/8W
R656	ERD18TJ151	Carbon	150Ω	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R658	ERD18TJ103	Carbon	10KΩ	1/8W
R659	ERD18TJ224	Carbon	220KΩ	1/8W
R660	ERD18TJ472	Carbon	4.7KΩ	1/8W
R661	ERD18TJ151	Carbon	150Ω	1/8W
R662	ERD18TJ103	Carbon	10KΩ	1/8W
R663	ERD18TJ680	Carbon	68Ω	1/8W
R664	ERD18TJ561	Carbon	560Ω	1/8W
R666	ERD18TJ561	Carbon	560Ω	1/8W
R667	ERD18TJ222	Carbon	2.2KΩ	1/8W
R668	ERD18TJ682	Carbon	6.8KΩ	1/8W
VR601	YWSR19R470B	Variable Resistor	470Ω	
VR602	YWSR19R3.3KB	Variable Resistor	3.3KΩ	
VR603	YWSR19R10KB	Variable Resistor	10KΩ	
C501	ECEA1HS010	Electrolytic	1μF	50V
C502	ECEA1CS470	Electrolytic	47μF	16V
C503	ECSZ35EAR47	Tantalun	0.47μF	35V
C504	ECEA0JS101	Electrolytic	100μF	6V
C505	ECEA1AS470	Electrolytic	47μF	10V
C506	ECCD1H330K	Ceramic	33pF	50V
C507	ECCD1H101K	Ceramic	100pF	50V
C508	ECQS1331JZ	Styrol	330pF	125V
C509	ECQS1561JZ	Styrol	560pF	125V
C510	ECCD1H560K	Ceramic [WV1100AN Only]	56pF	50V
C511	ECCD1H680K	Ceramic	68pF	50V
C512	ECQS1821JZ	Styrol	820pF	125V
C513	ECQS1471JZ	Styrol	470pF	125V
C514	ECEA1CS101	Electrolytic	100μF	16V
C515, 516	ECQS1472JWT	Styrol [WV1100AP/1104AP Only]	4700pF	125V
C517	ECEA1CS221	Electrolytic	220μF	16V
C518	ECEA1CS330	Electrolytic	33μF	16V
C519	ECQM1H563JZ	Polyester	0.056μF	50V
C520	ECQM1H683JZ	Polyester	0.068μF	50V
C521	ECQM1H332KZ	Polyester	0.0033μF	50V
C522	ECQM1H222KZ	Polyester	0.0022μF	50V
C523	ECEA1AS101	Electrolytic	100μF	10V
C525	ECQM1H822KZ	Polyester	0.0082μF	50V
C530	ECQM1H333KZ	Polyester	033μF	50V
C531	ECQS1561JZ	Styrol	560pF	125V
C532	YCQMS05222K	Polyester	0.0022μF	50V
C601	YCQMS10473K	Polyester	0.047μF	100V
C602	ECCD1H100K	Ceramic	10pF	50V
C603, 604	ECEA1CS100	Electrolytic	10μF	16V
C605, 606	ECEA1CS470	Electrolytic	47μF	16V
C607	ECQS1151JZ	Styrol	150pF	125V
C608	ECEA1CS100	Electrolytic	10μF	16V
C609	ECEA1ES4R7	Electrolytic	4.7μF	25V

SYM-BOL NO.	PART NO.	DESCRIPTION
C610	YCQMS05272K	Styrol 2700pF 125V
C611	ECEA1CS101	Electrolytic 100μF 16V
C612	ECEA1ES4R7	Electrolytic 4.7μF 25V
C613	ECEA1CS330	Electrolytic 33μF 16V
C614	ECEA1CS221	Electrolytic 220μF 16V
C615	ECEA16N33	Electrolytic 33μF 16V
C616	ECEA1CS330	Electrolytic 33μF 16V
C617	ECEA1CS101	Electrolytic 100μF 16V
C618	ECEA1CS471	Electrolytic 470μF 16V
C620	ECEA1CS100	Electrolytic 10μF 16V
C621	ECEA1HS010	Electrolytic 1μF 50V
C622	ECEA1HS010	Electrolytic 1μF 50V
C623, 624	YCQMS10104K	Polyester 0.1μF 100V
C627	ECCD1H270K	Ceramic 27pF 50V
C628	ECEA50N1	Electrolytic 1μF 50V
C629	ECQS1101JZ	Styrol 100pF 125V
C630	ECEA1CS471	Electrolytic 470μF 16V
L501	YWCAN30008R	Inductance [WV1100A /1104A Only]
SW601	YW2-2SSW	Change Over Switch
CON2-JM	YW5048-8A	8-Pin Jack Male
CON3-JM	YW171255-1	Target Pin
CON5-JM	YW5048-7A	7-Pin Jack Male
CON7-JM	YW5048-3A	3-Pin Jack Male
M41	YWV10XALM11	Shield Plate
M42	YWV10XALM12A	Shield Plate for Part Side
M43	YWV10XALM13	Shield Cover
M44	YWV1100AFR1B	Fastening Bracket for Switch

YWV1300AZK2 [WV1300AN/AE]

PCB2	★ YWV1100AZK2	Printed Circuit Board Assembly
IC501	DN850	Integrated Circuit
IC502	YWHD7402P	Integrated Circuit
IC503	YWSM6430B	Integrated Circuit [WV1350AP/1354AP Only]
Q501, 502	2SA721	Transistor
Q503 ~506	2SC1047-CD	Transistor
Q508	2SA720-RS	Transistor
Q509, 510	2SC1047-CD	Transistor
Q511	2SC828-QR	Transistor
Q601	2SK19-GR	Transistor
Q602 ~604	2SC1047-CD	Transistor
Q605	2SA720-RS	Transistor
Q606	2SC828-QR	Transistor
Q607	2SC1047-CD	Transistor
Q608	2SC828-QR	Transistor
Q610	2SC1317-RS	Transistor
Q611	2SC828-QR	Transistor
Q612	2SC1566-QR	Transistor
Q613	2SC828-QR	Transistor
D501, 502	MA150	Diode
D503	YUDXE068	Diode
D504 ~510	MA150	Diode
D511	OA91	Diode
D512	MA150	Diode
D601 ~603	MA150	Diode
D604 ~605	OA91	Diode
X501	YWBWVHS3125K	Crystal [WV1300AN/1350AN Only]
	YWBWVHS3125K	Crystal [WV1300AE/1350AE Only]
R501, 502	ERD18TJ750	Carbon 75Ω 1/8W
R503, 504	ERD18TJ102	Carbon 1KΩ 1/8W
R505, 506	ERD18TJ221	Carbon 220Ω 1/8W
R507 ~510	ERD18TJ471	Carbon 470Ω 1/8W
R511	ERD18TJ104	Carbon 100K 1/8W
R512	ERD18TJ103	Carbon 10KΩ 1/8W
R513	ERD18TJ102	Carbon 1KΩ 1/8W
R514	ERD18TJ103	Carbon 10KΩ 1/8W
R515	ERD18TJ393	Carbon 39KΩ 1/8W
R516	ERD18TJ123	Carbon 12KΩ 1/8W
R517	ERD18TJ273	Carbon 2.2KΩ 1/8W
R518	ERD18TJ102	Carbon 1KΩ 1/8W
R519	ERD18TJ222	Carbon 2.2KΩ 1/8W
R520, 521	ERD18TJ103	Carbon 10KΩ 1/8W
R522	ERD18TJ472	Carbon 4.7KΩ 1/8W
R523	ERD18TJ222	Carbon 2.2KΩ 1/8W
R524	ERD18TJ472	Carbon 4.7KΩ 1/8W
R525	ERD18TJ222	Carbon 2.2KΩ 1/8W
R526	ERD18TJ822	Carbon 8.2KΩ 1/8W
R527	ERD18TJ153	Carbon 15KΩ 1/8W
R528, 529	ERD18TJ562	Carbon 5.6KΩ 1/8W
R530	ERD18TJ333	Carbon 33KΩ 1/8W
R531	ERD18TJ562	Carbon 5.6KΩ 1/8W
R532	ERD18TJ561	Carbon 560Ω 1/8W
R533	ERD18TJ471	Carbon 470Ω 1/8W
R534	ERD18TJ472	Carbon 4.7KΩ 1/8W
R535	ERD18TJ822	Carbon 8.2KΩ 1/8W
R536	ERD18TJ472	Carbon 4.7KΩ 1/8W
R537	ERD18TJ273	Carbon 27KΩ 1/8W
R538	ERD18TJ222	Carbon 2.2KΩ 1/8W
R539, 540	ERD18TJ103	Carbon 10KΩ 1/8W
R541	ERD18TJ472	Carbon 4.7KΩ 1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION			SYM-BOL NO.	PART NO.	DESCRIPTION		
R542	ERD18TJ103	Carbon	10KΩ	1/8W	R638	ERD18TJ682	Carbon	6.8KΩ	1/8W
R543	ERD18TJ222	Carbon	2.2KΩ	1/8W	R639	ERD18TJ101	Carbon	100Ω	1/8W
					R640	ERD18TJ391	Carbon	390Ω	1/8W
R544	ERD18TJ561	Carbon	560Ω	1/8W					
R545, 546	ERD18TJ103	Carbon	10KΩ	1/8W	R641	ERD18TJ680	Carbon	68Ω	1/8W
					R643	ERD18TJ222	Carbon	2.2KΩ	1/8W
R547	ERD18TJ562	Carbon	5.6KΩ	1/8W	R645	ERD18TJ682	Carbon	6.8KΩ	1/8W
R548	ERD18TJ272	Carbon	2.7KΩ	1/8W	R646	ERD18TJ562	Carbon	5.6KΩ	1/8W
R549	ERD18TJ472	Carbon	4.7KΩ	1/8W	R647	ERD18TJ333	Carbon	33KΩ	1/8W
					R648	ERD18TJ332	Carbon	3.3KΩ	1/8W
R550	ERD18TJ333	Carbon	33KΩ	1/8W	R649	ERD18TJ331	Carbon	330Ω	1/8W
R551	ERC14GK475	Solid	4.7MΩ	1/4W					
					R650	ERD18TJ562	Carbon	5.6KΩ	1/8W
R552	ERD18TJ154	Carbon	150KΩ	1/8W	R651	ERD18TJ472	Carbon	4.7KΩ	1/8W
R553	ERD18TJ333	Carbon	33KΩ	1/8W	R652	ERD18TJ334	Carbon	330KΩ	1/8W
R554	ERD18TJ103	Carbon	10KΩ	1/8W	R653, 654	ERC14GK106	Solid	10MΩ	1/4W
R555	ERD18TJ333	Carbon	33KΩ	1/8W					
R556	ERD18TJ103	Carbon	10KΩ	1/8W	R655	ERD18TJ105	Carbon	1MΩ	1/8W
					R656	ERD18TJ151	Carbon	150Ω	1/8W
R601	ERD18TJ274	Carbon	270KΩ	1/8W	R658	ERD18TJ103	Carbon	10KΩ	1/8W
R602	ERD18TJ223	Carbon	22KΩ	1/8W	R659	ERD18TJ224	Carbon	220KΩ	1/8W
R603	ERD18TJ101	Carbon	100Ω	1/8W	R660	ERD18TJ472	Carbon	4.7KΩ	1/8W
R604	ERD18TJ102	Carbon	1KΩ	1/8W	R661	ERD18TJ151	Carbon	150Ω	1/8W
R605	ERD18TJ101	Carbon	100Ω	1/8W	R662	ERD18TJ103	Carbon	10KΩ	1/8W
R606, 607	ERD18TJ223	Carbon	22KΩ	1/8W	R663	ERD18TJ680	Carbon	68Ω	1/8W
					R664	ERD18TJ561	Carbon	560Ω	1/8W
R608	ERD18TJ272	Carbon	2.7KΩ	1/8W					
					R666	ERD18TJ561	Carbon	560Ω	1/8W
R609	ERD18TJ220	Carbon	22Ω	1/8W	R667	ERD18TJ222	Carbon	2.2KΩ	1/8W
R610	ERD18TJ123	Carbon	12KΩ	1/8W	R668	ERD18TJ272	Carbon	2.7KΩ	1/8W
R611	ERD18TJ152	Carbon	1.5KΩ	1/8W	VR601	YWSR19R470B	Variable Resistor	470Ω	
R612	ERD18TJ391	Carbon	390Ω	1/8W					
R613	ERD18TJ151	Carbon	150Ω	1/8W	VR602	YWSR19R3.3KB	Variable Resistor	3.3KΩ	
					VR603	YWSR19R10KB	Variable Resistor	10KΩ	
R614	ERD18TJ123	Carbon	12KΩ	1/8W	C501	ECEA1HS010	Electrolytic	1μF	50V
R615	ERD18TJ103	Carbon	10KΩ	1/8W	C502	ECEA1CS470	Electrolytic	47μF	16V
R616	ERD18TJ563	Carbon	56KΩ	1/8W	C503	ECSZ35EAR47	Tantalun	0.47μF	35V
R617	ERD18TJ102	Carbon	1KΩ	1/8W					
R618	ERD18TJ680	Carbon	68Ω	1/8W	C504	ECEA0JS101	Electrolytic	100μF	6V
					C505	ECEA1AS470	Electrolytic	47μF	10V
R619	ERD18TJ331	Carbon	330Ω	1/8W	C506	ECCD1H330K	Ceramic	33pF	50V
R620	ERD18TJ122	Carbon	1.2KΩ	1/8W					
					C507	ECCD1H101K	Ceramic	100pF	50V
R621	ERD18TJ470	Carbon	47Ω	1/8W	C508	ECQS1331JZ	Styrol	330pF	125V
R622	ERD18TJ272	Carbon	2.7KΩ	1/8W	C509	ECQS1561JZ	Styrol	560pF	125V
R623, 624	ERD18TJ102	Carbon	1KΩ	1/8W	C510	ECCD1H560K	Ceramic	56pF	50V
					C511	ECCD1H680K	Ceramic	68pF	50V
R625	ERD18TJ222	Carbon	2.2KΩ	1/8W	C512	ECQS1821JZ	Styrol	820pF	125V
R626	ERD18TJ103	Carbon	10KΩ	1/8W	C513	ECQS1471JZ	Styrol	470pF	125V
R627	ERD18TJ104	Carbon	100KΩ	1/8W	C514	ECEA1CS101	Electrolytic	100μF	16V
R628	ERD18TJ682	Carbon	6.8KΩ	1/8W	C517	ECEA1CS221	Electrolytic	220μF	16V
R629	ERD18TJ472	Carbon	4.7KΩ	1/8W					
					C518	ECEA1CS330	Electrolytic	33μF	16V
R630	ERD18TJ102	Carbon	1KΩ	1/8W	C519	ECQM1H563KZ	Polyester	0.056μF	50V
R633	ERD18TJ471	Carbon	470Ω	1/8W	C520	ECQM1H683KZ	Polyester	0.068μF	50V
R634	ERD18TJ472	Carbon	4.7KΩ	1/8W	C521	ECQM1H332KZ	Polyester	0.0033μF	50V
R635	ERD18TJ272	Carbon	2.7KΩ	1/8W	C522	ECQM1H222KZ	Polyester	0.0022μF	50V
R636	ERD18TJ472	Carbon	4.7KΩ	1/8W					
R637	ERD18TJ472	Carbon	4.7KΩ	1/8W	C523	ECEA1AS101	Electrolytic	100μF	10V

SYM-BOL NO.	PART NO.	DESCRIPTION
C525	ECQM1H822KZ	Polyester 0.0082μF 50V
C526, 527	ECCD1H390JC	Ceramic 39pF 50V [WV1350A /1354A Only]
C528	ECQM1H563KZ	Polyester 0.056μF 50V
C529	ECQS1471JZ	Styrol 470pF 125V
C530	ECQM1H333KZ	Polyester 0.033μF 50V
C531	ECQS1561JZ	Styrol 560pF 125V
C532	YCQMS05222K	Polyester 0.0022μF 50V
C601	YCQMS10473K	Polyester 0.047μF 100V
C602	ECCD1H100K	Ceramic 10pF 50V
C603, 604	ECEA1CS100	Electrolytic 10μF 16V
C605, 606	ECEA1CS470	Electrolytic 47μF 16V
C607	ECQS1151JZ	Styrol 150pF 125V
C608	ECEA1CS100	Electrolytic 10μF 16V
C609	ECEA1ES4R7	Electrolytic 4.7μF 25V
C610	YCQMS05272K	Styrol 2700pF 125V
C611	ECEA1CS101	Electrolytic 100μF 16V
C612	ECEA1ES4R7	Electrolytic 4.7μF 25V
C613	ECEA1CS330	Electrolytic 33μF 16V
C614	ECEA1CS221	Electrolytic 220μF 16V
C615	ECEA16N33	Electrolytic 33μF 16V
C616	ECEA1CS330	Electrolytic 33μF 16V
C617	ECEA1CS101	Electrolytic 100μF 16V
C618	ECEA1CS471	Electrolytic 470μF 116V
C620	ECEA1CS100	Electrolytic 10μF 16V
C621	ECEA1HS010	Electrolytic 1μF 50V
C622	ECEA1HS010	Electrolytic 1μF 50V
C623, 624	YCQMS10104K	Polyester 0.1μF 100V
C627	ECCD1H270K	Ceramic 27pF 50V
C628	ECEA50N1	Electrolytic 1μF 50V
C629	ECQS1101JZ	Styrol 100μF 125V
C630	ECEA1CS471	Electrolytic 470μF 16V
SW601	YW2-2SSW	Change-Over Switch
CON2-JM	YW5048-8A	8-Pin Jack-Male
CON3JM	YW171255-1	Target Pin
CON5-JM	YW5048-7A	7-Pin Jack-Male
CON7-JM	YW5048-3A	3-Pin Jack-Male
M41	YWV10XALM11B	Shield Plate
M42	YWV10XALM12A	Shield Plate for Part Side
M43	YWV10XALM13B	Shield Cover
M44	YWV1100AFR1B	Fastening Bracket for Switch

WV1350AZK2 [WV1350AN/AE]

PCB2	★ YWV1150AZK2	Printed Circuit Board Assembly
IC501	DN850	Integrated Circuit
IC502	YWHD7402P	Integrated Circuit

SYM-BOL NO.	PART NO.	DESCRIPTION
IC503	YWSM6430B	Integrated Circuit
Q501, 502	2SA721	Transistor
Q503 ~506	2SC1047-CD	Transistor
Q508	2SA720-RS	Transistor
Q509, 510	2SC1047-CD	Transistor
Q511 ~513	2SC828-QR	Transistor
Q601	2SK19-GR	Transistor
Q602 ~604	2SC1047-CD	Transistor
Q605	2SA720-RS	Transistor
Q606	2SC828-QR	Transistor
Q607	2SC1047-CD	Transistor
Q608	2SC828-QR	Transistor
Q609	2SC1047-CD	Transistor
Q610	2SC1317-RS	Transistor
Q613	2SC828-QR	Transistor
D501, 502	MA150	Diode
D503	YUDXE068	Diode
D504 ~506	MA150	Diode
D509 ~510	MA150	Diode
D511	OA91	Diode
D512	MA150	Diode
D601 ~603	MA150	Diode
X501	YWBWVHS315K	Crystal
R501, 502	ERD18TJ750	Carbon 75Ω 1/8W
R503, 504	ERD18TJ102	Carbon 1KΩ 1/8W
R505, 506	ERD18TJ221	Carbon 220Ω 1/8W
R507 ~510	ERD18TJ471	Carbon 470Ω 1/8W
R511	ERD18TJ104	Carbon 100K 1/8W
R512	ERD18TJ103	Carbon 10KΩ 1/8W
R513	ERD18TJ102	Carbon 1KΩ 1/8W
R514	ERD18TJ103	Carbon 10KΩ 1/8W
R515	ERD18TJ393	Carbon 39KΩ 1/8W
R516	ERD18TJ123	Carbon 12KΩ 1/8W
R518	ERD18TJ102	Carbon 1KΩ 1/8W
R519	ERD18TJ222	Carbon 2.2KΩ 1/8W
R520, 521	ERD18TJ103	Carbon 10KΩ 1/8W
R522	ERD18TJ472	Carbon 4.7KΩ 1/8W
R523	ERD18TJ222	Carbon 2.2KΩ 1/8W
R524	ERD18TJ472	Carbon 4.7KΩ 1/8W
R525	ERD18TJ222	Carbon 2.2KΩ 1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R526	ERD18TJ822	Carbon	8.2KΩ	1/8W
R527	ERD18TJ153	Carbon	15KΩ	1/8W
R528, 529	ERD18TJ562	Carbon	5.6KΩ	1/8W
R530	ERD18TJ333	Carbon	33KΩ	1/8W
R531	ERD18TJ562	Carbon	5.6KΩ	1/8W
R532	ERD18TJ561	Carbon	560Ω	1/8W
R533	ERD18TJ471	Carbon	470Ω	1/8W
R534	ERD18TJ472	Carbon	4.7KΩ	1/8W
R535	ERD18TJ822	Carbon	8.2KΩ	1/8W
R536	ERD18TJ472	Carbon	4.7KΩ	1/8W
R537	ERD18TJ273	Carbon	27KΩ	1/8W
R538	ERD18TJ222	Carbon	2.2KΩ	1/8W
R539, 540	ERD18TJ103	Carbon	10KΩ	1/8W
R541	ERD18TJ472	Carbon	4.7KΩ	1/8W
R542	ERD18TJ103	Carbon	10KΩ	1/8W
R543	ERD18TJ222	Carbon	2.2KΩ	1/8W
R544	ERD18TJ561	Carbon	560Ω	1/8W
R545, 546	ERD18TJ103	Carbon	10KΩ	1/8W
R547	ERD18TJ562	Carbon	5.6KΩ	1/8W
R548	ERD18TJ272	Carbon	2.7KΩ	1/8W
R549	ERD18TJ472	Carbon	4.7KΩ	1/8W
R550	ERD18TJ333	Carbon	33KΩ	1/8W
R551	ERC14GK475	Solid	4.7MΩ	1/4W
R552	ERD18TJ154	Carbon	150KΩ	1/8W
R553	ERD18TJ333	Carbon	33KΩ	1/8W
R554	ERD18TJ103	Carbon	10KΩ	1/8W
R555	ERD18TJ333	Carbon	33KΩ	1/8W
R601	ERD18TJ274	Carbon	270KΩ	1/8W
R602	ERD18TJ223	Carbon	22KΩ	1/8W
R603	ERD18TJ101	Carbon	100Ω	1/8W
R604	ERD18TJ102	Carbon	1KΩ	1/8W
R605	ERD18TJ101	Carbon	100Ω	1/8W
R606, 607	ERD18TJ223	Carbon	22KΩ	1/8W
R608	ERD18TJ272	Carbon	2.7KΩ	1/8W
R609	ERD18TJ220	Carbon	22Ω	1/8W
R610	ERD18TJ123	Carbon	12KΩ	1/8W
R611	ERD18TJ152	Carbon	1.5KΩ	1/8W
R612	ERD18TJ391	Carbon	390Ω	1/8W
R613	ERD18TJ151	Carbon	150Ω	1/8W
R614	ERD18TJ123	Carbon	12KΩ	1/8W
R615	ERD18TJ103	Carbon	10KΩ	1/8W
R616	ERD18TJ563	Carbon	56KΩ	1/8W
R617	ERD18TJ102	Carbon	1KΩ	1/8W
R618	ERD18TJ680	Carbon	68Ω	1/8W
R619	ERD18TJ331	Carbon	330Ω	1/8W
R620	ERD18TJ122	Carbon	1.2KΩ	1/8W

SYM-BOL NO.	PART NO.	DESCRIPTION		
R621	ERD18TJ470	Carbon	47Ω	1/8W
R622	ERD18TJ272	Carbon	2.7KΩ	1/8W
R623, 624	ERD18TJ102	Carbon	1KΩ	1/8W
R625	ERD18TJ222	Carbon	2.2KΩ	1/8W
R626	ERD18TJ103	Carbon	10KΩ	1/8W
R627	ERD18TJ104	Carbon	100KΩ	1/8W
R628	ERD18TJ682	Carbon	6.8KΩ	1/8W
R629	ERD18TJ472	Carbon	4.7KΩ	1/8W
R630	ERD18TJ102	Carbon	1KΩ	1/8W
R631, 632	ERD18TJ332	Carbon	3.3KΩ	1/8W
R633	ERD18TJ471	Carbon	470Ω	1/8W
R634	ERD18TJ472	Carbon	4.7KΩ	1/8W
R635	ERD18TJ272	Carbon	2.7KΩ	1/8W
R636	ERD18TJ472	Carbon	4.7KΩ	1/8W
R637	ERD18TJ472	Carbon	4.7KΩ	1/8W
R638	ERD18TJ682	Carbon	6.8KΩ	1/8W
R639	ERD18TJ101	Carbon	100Ω	1/8W
R640	ERD18TJ391	Carbon	390Ω	1/8W
R641	ERD18TJ680	Carbon	68Ω	1/8W
R642	ERD18TJ122	Carbon	1.2KΩ	1/8W
R643	ERD18TJ222	Carbon	2.2KΩ	1/8W
R644	ERD18TJ182	Carbon	1.8KΩ	1/8W
R653, R654	ERD18TJ474	Carbon	470KΩ	1/8W
R655	ERD18TJ105	Carbon	1MΩ	1/8W
R656	ERD18TJ151	Carbon	150Ω	1/8W
R657	ERD18TJ221	Carbon	220Ω	1/8W
R658	ERD18TJ103	Carbon	10KΩ	1/8W
R659	ERD18TJ224	Carbon	220KΩ	1/8W
R660	ERD18TJ472	Carbon	4.7KΩ	1/8W
R661	ERD18TJ151	Carbon	150Ω	1/8W
R662	ERD18TJ103	Carbon	10KΩ	1/8W
R663	ERD18TJ680	Carbon	68Ω	1/8W
R664	ERD18TJ561	Carbon	560Ω	1/8W
R665	ERD18TJ103	Carbon	10KΩ	1/8W
R666	ERD18TJ561	Carbon	560Ω	1/8W
R667	ERD18TJ222	Carbon	2.2KΩ	1/8W
R668	ERD18TJ272	Carbon	2.7KΩ	1/8W
R669	ERD18TJ332	Carbon	3.3KΩ	1/8W
TH601	ERTD2FHL332S	Thermistor	3.3KΩ	
VR601	YWSR19R470B	Variable Resistor	470Ω	
VR602	YWSR19R3.3KB	Variable Resistor	3.3KΩ	
VR603	YWSR19R10KB	Variable Resistor	10KΩ	
C501	ECEA1HS010	Electrolytic	1μF	50V
C502	ECEA1CS470	Electrolytic	47μF	16V
C503	ECSZ35EAR47	Tantalun	0.47μF	35V
C504	ECEA0JS101	Electrolytic	100μF	6V
C505	ECEA1AS470	Electrolytic	47μF	10V
C506	ECCD1H330K	Ceramic	33pF	50V

SYM-BOL NO.	PART NO.	DESCRIPTION		
C507	ECCD1H101K	Ceramic	100pF	50V
C508	ECQS1331JZ	Styrol	330pF	125V
C509	ECQS1561JZ	Styrol	560pF	125V
C510	ECCD1H560K	Ceramic	56pF	50V
C511	ECCD1H680K	Ceramic	68pF	50V
C512	ECQS1821JZ	Styrol	820pF	125V
C513	ECQS1471JZ	Styrol	470pF	125V
C514	ECEA1CS101	Electrolytic	100μF	16V
C515, 516	ECQS1472JWT	Styrol [WV1100AP/1104AP Only]	4700pF	125V
C517	ECEA1CS221	Electrolytic	220μF	16V
C518	ECEA1CS330	Electrolytic	33μF	16V
C519	ECQM1H563JZ	Polyester	0.056μF	50V
C520	ECQM1H683JZ	Polyester	0.068μF	50V
C521	ECQM1H332KZ	Polyester	0.0033μF	50V
C522	ECQM1H222KZ	Polyester	0.0022μF	50V
C523	ECEA1AS101	Electrolytic	100μF	10V
C525	ECQM1H822KZ	Polyester	0.0082μF	50V
C526, 527	ECCD1H390JC	Ceramic	39pF	50V
C528	ECQM1H563JZ	Polyester	0.056μF	50V
C529	ECQS1471JZ	Styrol	470PF	125V
C530	ECQM1H333KZ	Polyester	0.33μF	50V
C531	ECQS1561JZ	Styrol	560pF	125V
C532	YCQMS05222K	Polyester	0.0022μF	50V
C601	YCQMS10473K	Polyester	0.047μF	100V
C602	ECCD1H100K	Ceramic	10pF	50V
C603, 604	ECEA1CS100	Electrolytic	10μF	16V
C605, 606	ECEA1CS470	Electrolytic	47μF	16V
C607	ECQS1151JZ	Styrol	150pF	125V
C608	ECEA1CS100	Electrolytic	10μF	16V
C609	ECEA1ES4R7	Electrolytic	4.7μF	25V
C610	YCQMS05272K	Styrol	2700pF	125V
C611	ECEA1CS101	Electrolytic	100μF	16V
C612	ECEA1ES4R7	Electrolytic	4.7μF	25V
C613	ECEA1CS330	Electrolytic	33μF	16V
C614	ECEA1CS221	Electrolytic	220μF	16V
C615	ECEA16N33	Electrolytic	33μF	16V
C616	ECEA1CS330	Electrolytic	33μF	16V
C617	ECEA1CS101	Electrolytic	100μF	16V
C618	ECEA1CS471	Electrolytic	470μF	16V
C619	ECEA1CS470	Electrolytic	47μF	16V
C623, 624	YCQMS10104K	Polyester	0.1μF	100V
C627	ECCD1H270K	Ceramic	27pF	50V
C628	ECEA50N1	Electrolytic	1μF	50V
C629	ECQS1101JZ	Styrol	100pF	125V

SYM-BOL NO.	PART NO.	DESCRIPTION
SW601	YW2-2SSW	Change Over Switch
CON2-JM	YW5048-8A	8-Pin Jack Male
CON3	YW17255-1	Target Jack-Male
CON5-JM	YW5048-7A	7-Pin Jack Male
CON7-JM	YW5048-3A	3-Pin Jack Male
M41	YWV10XALM11B	Shield Plate
M42	YWV10XALM12A	Shield Plate for Part Side
M43	YWV10XALM13	Shield Cover
M44	YWV1100AFR1B	Fastening Bracket for Switch

YWV1000YZK3

PCB4	YWV1000YZK3	Printed Circuit Board Assembly
F	TWTS1R25A	Fuse
	TWTS125MA	Fuse
E1	YWSN5053	Fuse Holder
E2	YWT-028	Tep

ACCESSORY PARTS

P2	MS-YA	Coaxial Connector
P3	YWA5	Adapter
M27	★YWV1100YRB1	Instruction Book [WV1100AN/AE Only]
	★YWV1300YRB1	Instruction Book [WV1300AN/AE Only]
	★YWV1350YRB1	Instruction Book [WV1350AN/AE Only]
M28	YW-B-RB01	Warranty Cord [WV1100AE/B,1300AE/B Only WV1350AE/B]
M29	YW-BCG-UR01	Label A [WV1100AE/1300AE Only WV1350AE]
M30	YWV1000AUR2	National Label
M31	YWFP10	Lens Cleaner [WV1350AN/AE Only]
M32	YWT20X35C03	Plastic Bag
M33	YWT10X10C03	Plastic Bag
M34	YW-B-UR01	Label B [WV1100AE/B,1300AE/B Only WV1350AE/B]

PACKAGING PARTS

M35	★YWV1100YPB1	Packaging Case Complate
M36	YWT25X60X3	Plastic Bag
M38	YWT20X35C03	Plastic Bag for Cable